— THE —

Therapeutic Gazette.

Old Series, Vol. IV. | Detroit, February 15, 1880. | New Series, Vol. I, No. 2.

Original Department.

[Written for The Therapeutic Gazette.]

Fungi and their Educts — Ergot and Sclerotic Acid.

By Carl Jungk, Ph. D., Detroit, Mich. Professor of General Chemistry, Michigan College of Medicine.

FUNGI are a class of plants belonging to the second grand division of the vegetable kingdom, the sub-kingdom cryptogamia, or flowerless plants, and the province of thallogens, cohort, hysterophyta. They are distinguished from higher orders of plants by their structural peculiarities, mainly shown in the soft, spongy body, consisting of a mass of peculiarly interwoven thread-like cells (hyphæ). The fungi, like animals, maintain their existence at the expense of already existing organic nourishment; they also take up oxygen and give off carbonic acid, and do not produce chlorophyll or starch. According to Barscow they even exhale ponderable quantities of ammonia, as well by day as at night. At present, an exact systematic classification does not exist, recent investigations showing that entire genera of former systems were only different stages of developement of other forms; and the same fate seems to await yet other species. Very little is known of the origin of fungi. The fungi concerned in fermentations or micrococcus-forms are probably primitive creations. The vegetative process of the algæ consists of but a single cell. Belonging to a higher order of developement are the hyphomycetes, which consist of a single ramified linear cell; they are, however, to be considered as representing the early stage of developement of higher forms.

The substance of fungi has been formed from linear cells, void of chlorophyll, which propagate themselves by cell-division.

The cellular membrane consists of cellulose, which is very seldom blued by iodine and sulphuric acid, and can therefore be considered as a special variety, the so-called fungous cellulose.

Fungi are sometimes found in use as articles of food, such as champignons, truffles, and various other mushrooms; sometimes officiating as germs of fermentation, or yeast fungi, belonging to the algæ; sometimes we find them as poison, such as agaricus muscarius, agaricus emeticus, and thallus impedicus.

According to Setellier, these mushrooms owe their poisonous properties to the presence of a fixed uncrystallizable alkaline narcotic principle, which is precipitable only by iodine and tannic acid, and which has received the name of amanitin.

Mistaking these noxious mushrooms for edible varieties has been the cause of numerous cases of poisoning; and thorough technical knowledge is necessary to avoid mistaking one variety for another.

Ancient history affords accounts of such cases of mushroom poisoning: For instance, the Roman Emperor Claudius Tiberius came to an untimely end by partaking of a dish of poisonous champignons. In the time of Plinius whole families are mentioned as falling victims to such mistakes. For such reasons Plinius styled food of this kind as of doubtful character. Seneca called them luxurious poisons (luxuriæ venenum); Nicander gave them the name of fermented earths (terræ fermentum).

The general characteristics of poisonous mushrooms are the following: Color, hollowness of the trunk, presence of milky juice, astringency, nauseous mouldy odor, remarkable softness of texture, and speedy change of color to blue, green or red on the surface exposed by fracture.

The poisonous principle is said to be removed, for the greater part, by washing with water and macerating in vinegar. Even for medicinal purposes the fungi have furnished their contingent, such as the surgeon's agaric (agaricus igniarius), the fungus laricis agaricus albus (purging agaric), and finally, as one of the most important, ergot of rye.

Ergot is the poisonous product of a pathological change occurring in the ovary of different grasses, such as triticum, hordeus, avena, oryza, several of the aperaceæ, carix scerpus, cyperus and several palms. It is to be regarded as the mycelium, or spawn; in other words, the intermediate, or dormant, stage of a fungus.

What Sevielle has designated as sphacelia segetum, ergotostia arbortifaciens is to be regarded as the first stage of developement of this fungus. It appears as a sort of flocculent web, which assumes the condition of a whitish mass, serving for the formation of the so-called male organs.

Ergot cannot be classed with the strong poisons, inasmuch as large or long-continued doses are necessary to produce dangerous symptoms in the human subject. Most of the lower animals, especially ruminants, seem to suffer but little from their toxic effects.

The medicinal effect of ergot on the human subject is varied. The irritating action on the intestinal canal is not very marked; the narcotic

action extends particularly to the cerebro-spinal nervous system ; secondarily to the sympathetic.

There is great discrepancy of opinion regarding the poisonous components of ergot. Formerly poisonous properties were attributed to the ergotin of Wiggers, which is a brownish-red, tasteless and odorless powder, forming about one and one-fourth per cent. of ergot, and which can be obtained by extraction with boiling alcohol. When freed from other constituents it is, however, entirely devoid of action.

The secalin of Winckler, which furnishes propylamin (trimethylamin) by distillation with caustic potassa, seems to be a resinous matter adhering to the fatty oil. This secalin developes, on heating in close vessels, a volatile body which produces symptoms of poisoning in both man and animals. This resinous substance can be extracted from the oil with which it is associated by boiling alcohol, which, on cooling, deposits also crystals of cholesterin and shows also traces of lactic acid.

The poisonous action of ergot in newly born infants has been noted by different observers, Beatty, Dungan, Hardy and Hooker, and has received the name of ergotismus neonatorum. The symptoms of this affection are convulsions, apoplexy and apparent death, and arise from the administration of ergot prior to delivery.

These scientists were able to discover, by auscultation of the uterus, as one of the immediate effects of this remedy, an intermission of the heart's action, reaching in one case even a reduction of pulsation from 140 to 80.

Other authorities deny the existence of a direct poisonous action on the fœtus, and explain the above named result as caused by a disturbance of circulation in the placenta which in turn is produced by the strong contraction of the uterus.

Leaving all these disputed points, there is ample reason for concluding that the variability in character of commercial preparations of ergot, as well as the variability of the drug itself, are sufficient to account for the discrepancy in these observations.

When it is considered that the manufacturer of such preparations deals with a fungus, a body in process of decomposition, which decomposition proceeds with a greater or lesser rapidity, according to the varying moisture of the air with which it is left in contact ; and in addition when it is known that the fungus itself varies so much according to the time of its collection, being even entirely inert when gathered long before or long after the time of harvesting, and that its medicinal value is only at a maximum when gathered at harvest, immediately dried and well preserved, it may be seen what difficulties the preparation of this remedy offer to the pharmacist in his endeavor to present a uniformly reliable representative thereof.

The production of a good ergot preparation requires a correct scientific knowledge of the drug itself, as a basis for judgment in the selection of samples ; further, a quantitative analysis is necessary as well of the drug itself as of the resulting preparation. Only in this way is it possible to assure the physician of the reliability and uniformity of the remedy placed in his hands.

Although there still exist differences of opinion regarding the potential value of their various ingredients, whether their specific action be due to this one or that one, it has nevertheless been noticed by conscientious physicians that certain preparations in commerce are to be preferred to others, inasmuch as the results obtained are much happier. From these premises the thoughtful and painstaking pharmacist can draw his own conclusions. The foregoing considerations have induced the introduction to the profession of *liquor ergotæ purificatus*. This has all the requirements of a good preparation, particularly as its composition is always constant, that is, independent of the value of the sample of drug which serves as its source. This is quite an important item when it is recognized that the composition and activity of ergot varies greatly in samples obtained in different years and from different sources. This uniformity is secured by a skillful application of the principles of chemistry to the selection, isolation and re-combination of the valuable active agents of the drug, followed by an assay of the finished article necessary to its final adjustment. In addition the preparation is so completed that all irritating and deleterious substances are excluded, making it possible to use the remedy hypodermically with or without previous dilution with water.

Frequently, however, cases present themselves where the physician does not wish to administer ergot or its preparations internally, and is not disposed to use a fluid extract, even if mild, for subcutaneous injection ; it is in such cases that a fluid aqueous preparation, which should embody the activity of ergot, has become a desideratum. The want is provided for in two constituents of ergot, namely, sclerotic acid and scleromucin. Dr. Planat, of Nice, reports that this (sclerotic) acid, used subcutaneously, possesses the entire valued activity of ergot, and also that its use in acute ophthalmia has been attended with surprisingly beneficial results.

The sclerotic acid of ergot is a nitrogenous principle, and its properties peculiarly adapt it to the uses under consideration. It is tasteless, has no odor, and is very soluble in water.

Dragendorff found its composition to be, in per cents.:

Carbon, 40.
Hydrogen, 5.2.
Nitrogen, 4.2.
Oxygen, 50.2.

Scleromucin, the principle accompanying it in ergot, is said to heighten its effects very noticeably. The great solubility of both these bodies in water, and the very feeble acid reaction of their solution, adapts them peculiarly to employment as subcutaneous injections.

[Written for the Therapeutic Gazette.]

Asthma.

By J. J. Mulheron, M. D., Prof. of Materia Medica and Therapeutics, Michigan College of Medicine.

SAYS Robert to Janet in George McDonald's inimitable "Sir Gibbie :" "Ay lass ! but gien ye hed this ashmy, makin' a' yer breist as 'twar lined wi' the san' paper 'at they hed been lichtin' a thoosan' or twa lucifer spunks upo' ye micht be driven to forget 'at the Lord was yer

life—for I can tell ye its no like haein' *his* breith i' yer nostrils."

The versatile novelist's description is very true to life, and there are few diseases better calculated to test the sufferer's faith, in medicines at least, for there are few whose repertory of remedies comprises so many "sure cures;" thus illustrating the trite remark that the disease for which the greatest number of cures is laid down is the most difficult of cure.

The literature of asthma is very voluminous, the bare titles of the works, brochures and monographs on the subject, being of themselves sufficient to fill, if printed in small type, not less than five or six pages of the size of the GAZETTE.

It is not necessary for the purposes of this article to give a resumé of this literature, although a consideration of certain points in the history, symptomatology, diagnosis and pathology is a necessary pre-requisite to an intelligent conception of the therapeutics of the disease. There has been a great deal of empiricism in the treatment of asthma, and, doubtless, the record of its therapeutics would be much less unsatisfactory had the urgency of the symptoms formed a less formidable barrier, in individual cases, to investigation into the causation. These symptoms are very pronounced, but they are by no means the disease; neither is the immediate cause of the symptoms, the contraction of the bronchial tubes, essentially the disease. It lies in some peculiar condition of the nervous system which renders it pathologically susceptible to particular influences. A number of these influences are already known, and when the rest of them are discovered, when the exact condition of the nervous system is defined, and when the remedy for correcting this condition is fixed, we shall have "a sure cure for asthma." Until these conditions are all complied with we must be content, first, with discovering, as we may in a great many instances, the exciting cause and removing it, and then empirically administering to the relief of the consequent nervous condition. By so doing we deprive the term empiricism of its objectionable meaning—make it rational.

There have been many classifications of asthma, the principal being based on the exciting cause, as uterine asthma, dyspeptic asthma, verminous asthma, hay asthma, and even arthritic asthma; the latter because of the supposed influence of gout in causing the attacks. For all practical purposes these many divisions are not only not necessary, but confusing. Dr. Hyde Salter's main divisions into Idiopathic or Primary and Symptomatic or Secondary, is the most simple, and probably, for practical purposes, the best. "Idiopathic" here, as when applied to many other diseases, is a convertible term with ignorance, and simply means that the cause has escaped detection. In the symptomatic form the causes are tangible, discoverable and known. Dr. Salter's subdivision of this main division covers in a general way all cases whose causes it is possible to get at: Peptic, bronchitic and cardiac. The exciting causes of the vast majority of such cases whose causes are known, lie in some derangement of either the stomach, the bronchial tubes or the heart. An overloaded stomach or the ingestion of some particular article of food or drink may excite bronchial spasm through reflex influence—by irritation of the gastric periphery of the pneumogastric nerve. In a similar manner the inhalation of pollen, of the fumes of a lucifer match, of the emanations of a hay-field or hay-loft, of the effluvia of certain animals, etc., etc., excite attacks. A patient of mine is employed in a laboratory, and never has an attack except when she inhales the dust of lycopodium.

Dyspepsia and bronchitis being constantly present attacks of asthma are liable to occur at any time, and without traceable cause. Disease of the heart is a very rare cause of asthma. Dyspnœa attendant on valvular disease of the heart is not asthma. True asthma, however, does sometimes occur through contraction of the air tubes, incited thereto by the pulmonary congestion incident to valvular insufficiency.

There has been no little theorizing as to the pathological condition present in spasmodic asthma. Without attempting to discuss the question, a simple reference to the different views may be interesting, if not, indeed, profitable. The generally received opinion, and the one which has the sanction of the majority of those who have written on the subject, is that the trouble lies in the contraction of the bronchial tubes. Certainly the physical signs go to support this view—the "multitudinous sounds, of all pitch, and utterly discordant, squeaking, chirping, mewing, whistling, cooing, snoring, and fifty other sounds." Another opinion is, that it is owing to the plugging of the tubes by mucus. The facts, however, that the respiratory sounds are mostly dry and not moist, and that the attack may, and does often, come and go without expectoration would seem to negative this opinion. Bamberger and Wintrich, two German writers, attribute all the symptoms to tonic spasm of the diaphragm, holding that with the depressed condition of that partition which obtains in a paroxysm there can be no spasm of the bronchi, without making clear, however, why the two conditions are incompatible. Another view is that advanced by Lebert, who maintains that there is a tonic spasm of the diaphragm, but that it is reflex, and begins in the bronchial muscles, in which it has its main factor, and that thence the inspiratory muscles of the throat and chest are the first excited to great forced activity, approachiug clonic spasm, and the diaphragm to more tonic, though not continuous, contraction. Still another view, and the only other thus far advanced really worthy of serious consideration, attributes the difficulty to a tumefaction of the bronchial mucous membrane in consequence of dilatation of its blood-vessels through vaso-motor nervous influence, this tumefaction causing a stenotic narrowing of the air passages similar to that which takes place in the nostrils in coryza. The fact that many asthmatics are attacked with paroxysms only when they take cold goes to support the latter view.

But enough has been said to outline the rational treatment. This, it will be perceived, lies in attempts to prevent the attack, and in relieving it when it has occurred. The prophylactic treatment consists in the avoidance of the direct exciting

causes of an attack, and in directing remedies to the relief of subjective conditions which constantly predispose to a paroxysm—conditions dependent on the disturbances in the stomach, bronchi and heart, already alluded to.

On being consulted by a patient suffering from a paroxysm, the first thing to be done is to discover the exciting cause, and if that lies in something which may be immediately removed, to remove it. An overloaded stomach or rectum, the presence of some offensive animal or substance, a close, ill-ventilated room, etc., come under this head. This done, the next thing is to relieve the paroxysm, and now the remedies that stare us in the face are called legion, for they are many.

Shall the particular one selected be a stimulant, a depressant or a sedative? We don't know. We know from experience that certain remedies are useful at such a time, but the *modus* of their *operandi* is as yet beyond our ken. We shall consider a few of these, premising this consideration with a list of the many from which the few will be chosen. This consists of the following, alphabetically arranged: Aconite, alum, antimony, assafœtida, atropia, belladonna, blisters, bromide of potassium, cannabis Indica, carbonic acid, chloral, chloroform, coffee, grindelia robusta, ipecacuanha, lobelia, nitrite of amyl, opium, stramonium, tobacco. The majority of these have long been under trial, and probably as much is known of them in this connection as is likely to be known. The merits of a few are comparatively little known. I shall narrate a few facts showing the effects of ipecac, nitrite of amyl and grindelia robusta.

The profuse expectoration which immediately precedes the relief of the paroxysm very naturally led to the belief that there exists a causative relation between the presence of mucus in the tubes and the dyspnœa. Remedies, therefore, whose effects are to remove this mucus (expectorants) were suggested. Among these may be mentioned ipecac as the representative of the class. Without enumerating cases it is sufficient to say that a thorough trial of ipecac, in a sufficient number of cases, has proven it to be a very unsatisfactory remedy in asthma. The expectoration immediately before the breaking up of the paroxysm is delusive. The fact is that the escape of the mucus is the effect rather than a cause; the relaxation of the spasm permits the escape of the mucus which had accumulated.

Nitrite of Amyl. The wonderful, almost specific, action of this drug in angina pectoris suggested its employment in asthma. There is a certain similarity in the essential condition of the two affections—the contraction of the non-striated muscular tissue. The article which relieves the contraction of the cardiac tissue of this nature would very naturally be expected to be serviceable in spasm of similar tissue wherever situated. The particular medium through which nitrite of amyl operates has not yet been definitely determined. It is one of those new drugs the results of the administration of which in disease are so direct and so unmistakable, but the manner of whose action is not yet clear. Most drugs are at first used more or less empirically, although in the case of this particular drug, Dr. Brunton, who first employed it, had some sort of a basis for its use, in certain physiological properties he had detected. This much seems to be definitely known of nitrite of amyl: it diminishes reflex action; and probably it is through this property that it is of service in asthma. Dr. Talfourd Jones is reported to have "found it remarkably successful in very severe attacks of asthma, removing the dyspnœa immediately and averting its return." My experience in its use is confined to five cases. In three of these it proved very promptly beneficial, in one there was but slight relief, and in another the relief lasted only while the patient was under the full effect of the drug—acting very much after the manner of chloroform in this respect. In the three it may be said to have acted curatively, in that it not only acted promptly in the breaking up of the paroxysm, but in also preventing its immediate recurrence. Administered during the premonitory stage in these cases it either completely warded off the attacks or very materially modified their severity. They are apparently idiopathic cases, that is, cases depending on no discoverable permanent pathological condition in either lungs, stomach, heart, or anywhere else. In the case in which it proved but partially beneficial there is a chronic bronchitis which has resisted a long course of treatment. In the other case the patient received a gun-shot wound of the chest and lung during the war of the rebellion, and the irritation due to the cicatrix is doubtless the cause of the attacks.

The nitrite of amyl was administered in the form of the "Pearls" which enterprising manufacturing pharmacists have placed in the hands of the profession. They are manufactured, I believe, by several of our houses—Messrs. McKelway and Reichardt in the East, and Parke, Davis & Co., of Detroit. My experience is confined to those made by the latter firm. They are put up in sizes containing from two to four drops of the drug. A three-drop pearl contains the medium dose. The patient may carry them in his pocket, and during an attack break one on his handkerchief, from which it may be inhaled.

Grindelia Robusta. Having seen an advertisement of this drug on its first introduction, I sent to Mr. Mack Webber, of Oakland, California, for a sample of the solid extract, which I tried on an inveterate case, one which had baffled all of the many attempts which I had made to relieve it. It was one of those cases in which there is no dispute as to the propriety of a resort to a "new remedy." Even one of our fastidiously conservative brethren would scarcely have objected to its use in this case, provided, always, that he could be assured that there was nothing poisonous or injurious in the drug. This patient was aged 56, and had been afflicted with bronchitis and paroxysmal asthma for a quarter of a century. A long course of iodide of potassium alternated with muriate of ammonia had allayed the bronchitis very materially, but had no influence on the asthma. I gave her a drachm of the solid extract of grindelia robusta, made up into thirty pills, one of which was ordered to be taken every three hours. To say that the effect was magical would sound extravagant, but that is the only objection to the use of the word. After two pills had been taken there was marked relief of the paroxysm,

and on the evening of the day on which she commenced taking the medicine, she fell asleep and slept until four o'clock on the following morning without waking. She awoke at this hour with an impending return of the paroxysm, but a single pill warded it off. The medicine was continued until the thirty pills were taken. It was followed by complete immunity from attack for three weeks a very unusual experience for this patient. On the recurrence of the attack she sent for some more pills, and I gave her thirty more, the taking of which was followed by results quite as satisfactory as those following the first lot. Grindelia robusta, in the form of the fluid extract now, has its permanent place in the old lady's cupboard, and it has never yet disappointed the hope with which she takes it when admonished of an attack of her dreaded enemy. I reported this case to the Wayne County Medical Society, some five years ago. On the strength of this report a number of the other members submitted the drug to a trial, and subsequently several flattering reports were presented.

With this experience in the use of grindelia robusta it would have been strange indeed had I not resorted to the drug somewhat empirically in the cases which afterwards came under my care. I will not trespass on the GAZETTE'S space with a detailed report of the cases in which the use of this drug has led me to look upon it as one of the most trustworthy articles of the materia medica in the treatment of asthma. It is not, however, a panacea for all cases. It will fail in some cases. It has failed in my hands, but the fault has been in the cases rather than in the remedy. No one remedy has, in my experience, successfully met so many cases. The reports which have lately come from England corroborate very strongly the favorable experience which many American practitioners have had. I notice in an abstract in the last number of the GAZETTE that Dr. Wm. Murrell, of London, has successfully employed grindelia robusta, and Ringer, in his "Therapeutics," recognizes its claims to a trial.

I will conclude this paper by calling attention to the dissimilarity in the different preparations of the drug which are on the market. The lady in whose case I first employed it, took a prescription from me, calling for the fluid extract, to a druggist of this city, who put up what purported to be a preparation of the true drug. It failed, however, to bring the relief which the patient had before experienced, and on examining it I found it to be quite different in its physical properties. The patient had previously complained of its difference in taste. The druggist informed me, on inquiry, that he had prepared the fluid extract himself from the crude drug, and was certain that it was reliable. He was an honest man, and I undertook to ascertain the cause of the inferiority of his preparation. He had prepared it after the usual manner of preparing fluid extracts, and herein lay his error. To properly exhaust the medicinal properties of the drug something more than alcohol is required. This I ascertained from the manufacturers whose preparation had given so much satisfaction. The drug was introduced by Dr. H. Gibbons, of San Francisco, who gave special instructions for its preparation. It was under these instructions that Mr. Mack Webber's extract, the first with which I experimented, was prepared, and the same plan is followed by the firm whose fluid extract I took particular pains to specify, after discovering the difference in the methods in which the drug is treated.

Another point to be borne in mind by those unfamiliar with the drug is that there are several varieties of grindelia in the market (robusta, squarrosa, glutinosa, hirsutula), and even Stillé & Maisch's National Dispensatory sagely declares that they are similar in their effects!

Call for grindelia robusta prepared after the manner recommended by Dr. Gibbons. None other reliable.

[Written for The Therapeutic Gazette.]

Hydrangea Arborescens.

By John A. Henning, M. D., Red Key, Indiana.

THIS plant, or shrub, is also known by the common names, seven barks, and wild hydrangea. It is an indigenous shrub, growing to the height of five or six feet. It is found abundantly in the southern, middle and western states, growing on hills, mountains, and near streams. It is very abundant in the Susquehanna and Schuylkill valleys. The flowers are very pretty, and where they can be had, are often found in boquets. On account of its being so abundant in the states, it is not a very popular remedy, though by many physicians prized very highly as a remedial agent.

The bark of the root is perhaps the most essential part; it is, at least, that most commonly used. It is a mild cathartic, sialogogue, tonic, solvent, and a peculiar diuretic.

I have been using the hydrangea for some time, and find by experience that it is one of our finest remedial agents in many of the diseases of the genito-urinary organs. I employ it in mucous irritation of the bladder, chronic gleet, incontinence of urine in children, enlarged prostate gland, and in strumous and gouty affections. Dr. S. W. Butler says that it is an excellent remedy for the removal of calculus or gravelly deposits in the bladder, when small or forming. He does not claim it will remove calculus of large size, but when of small size or forming only, and it does so by promoting the solution of the calculus deposit. I have no experience to corroborate this fact, but I learn by chemical analysis of the root of this plant that it contains starch, resin, gum, soda, lime, iron, potassa, magnesia, sulphuric and phosphoric acids, forming a combination, or a compound body within itself, which all the science and art of the medical profession can hardly approximate. This fact led me to its extensive use.

The physiological action of this remedy is very peculiar. In chronic gleet and mucous irritation of the bladder it acts as a diuretic and tonic, or slight astringent. In suppression of urine it promotes its flow, and restores the kidney to a normal action. In irritation or chronic inflammation of the kidney, it is a very fine remedy.

When albumen is discharged in the urine, I have found the hydrangea sufficient to arrest it promptly, no difference in what disease it may be present, as it can be used in almost any acute disease. It is an excellent remedy in chronic enlargement of the prostate gland by using it a considerable length of time.

The following are some of my prescriptions. I wish further to add that I seldom use the drug alone, but still make it the leading remedy, and the others as adjuvants.

For Bright's disease, to arrest discharge of albumen :

℞ Fl. ext. hydrangea, ʒ j
Fl. ext. buchu, ʒ ss.
M. Sig. One-half to one drachm three to four times a day.

In irritable condition of bladder or urethra :

℞ Hydrangea, ʒ j.
Gelseminum, 3 j.
M. Take half a drachm every four hours.

In hæmaturia give 3 ss. of hydrangea alternating with gallic acid grs. v every three or four hours.

In suppression of urine :

℞ Hydrangea, ʒ j.
Fl. ext. hair-cap moss, ʒ ss.
M. Sig. Half a drachm every two hours.

The above are some of the forms in which I use this valuable remedy. In any given disease of the genito-urinary organs, where I want a diuretic, and a tonic of the mucous membrane of the kidney, ureters, bladder and urethra, then I prescribe this remedy with much confidence.

I therefore can cheerfully recommend this remedy. The usual dose of the fluid extract of hydrangea is from one-half to one drachm, and may be used in acute and chronic diseases.

[Written for The Therapeutic Gazette.]

Folia Carobæ.

By Charles W. Zaremba, M. D., Chicago, Ills.

THE Brazilian physicians as well as the natives employ the leaves of the caroba roxa (bignonia obovata) and of the carobinha (bignonia caroba—Vellos), both of the bignoniaceas. The bignonia caroba is a worthy rival of the salsaparilha, but on account of its greater medicinal value, deserves a preference. In 1,000 grammes of air-dried leaves were contained :

Carobina	1.620
Crystallic carobic acid	0.040
Crystallic carobic, sebacylic acid	1.000
*Carobon (balsamic resin)	26.666
Neutral resin—not perceptible to taste or smell	33.334
Chlorophyll and vegetable wax	9.000
Extractive matter	10.550
Extractive matter, tartaric, lactic and oxalic acids	10.000
Malic acid and calcium	0.200
Tannic acid	4.390
Albumen, dextrin, malic acid, inorganic salts, etc., fibrine and water	885.010
Balsam (extractive matter)	14.420
Substance resembling humus	0.890
Bitter substance	2.880
Carobina	3.000
Bitter substance	2.830
Tannic acid	4.800
Resinous acid	2.000
Resin	5.000
Glucose	1.650
Extractive matter	19.530
Benzoic, citric, malic acids, albuminous substance, dextrin	76.100
Inorganic salts, fibrous matter and water	885.070

The balsamic extract of folia carobinha in doses of two to four grammes is an excellent stomachic and alterative in scrofulosis.

The casca de carobinha contains a larger quantity of alkaloid, which is produced with greater facility but contains no balsamic substance. For years the bark has been used in Brazil with success in syphilitic affections. The air-dried bark contains :

* Carobon—so called by Dr. Peckolt—the aromatic resin of the folia carobinha, is distinguished from other resins by a great variety of reactions, evaporates by heat, and in doses of two to three grains is very effective in chronic diseases of the skin, wounds, etc.

[Written for The Therapeutic Gazette.]

Lobelia Inflata as an Antidote in Animal and Insect Poisoning—With a Case.

By J. B. Cranfill, M. D., Turnersville, Texas.

I DESIRE to call the attention of the profession to the above, having seen nothing on the subject in any current medical literature or standard work, and believing that the merits of the lobelia inflata are little known in this respect. I have tried it, and have seen it tried, in a number of cases with marked and happy results. In all cases of bites by venomous reptiles or stings of insects its influence is remarkable. It not only acts as an emetic, cleansing the stomach, but as anti-poison, exhibiting its effects in a truly remarkable manner.

On the evening of June 6, 1879, I was called in great haste to see Mrs. B., æt. 31, who had been bitten at 10 o'clock the night previous by a spider of a species well known here as being very poisonous. When I arrived I found her in violent convulsions, cold, colliquative perspiration, extremities cold, loss of muscular power, oscillation of pupil, pulse small and frequent, loss of speech, and great nervous prostration. I immediately administered tinct. lobelia, ʒ ss., fluid extract capsicum gtts. xv. Ordered hot stones to extremities, and in ten minutes repeated the dose. Continued the lobelia (leaving off the capsicum) until I had administered nearly three fluid ounces of the tincture. In the course of an hour I was gratified to find all the symptoms mitigated, and in three hours the lady was able to converse rationally. Free emesis followed the second dose ; after that she vomited none. Applied a poultice containing carbonate of ammonia to the point which was bitten (right mamma) and left her. She had no further symptoms of poisoning.

As regards the dose in such cases, no formula can be followed. I give it until the poison is counteracted, not fearing, in the least, injury to the patient from the lobelia. Small doses of capsicum aid, to some extent, the activity of the remedy.

I give the above thoughts and observations for what they are worth, in the hope that they will be of benefit to the profession.

[Written for the Therapeutic Gazette.]

On the Use of New Remedies.

By R. Aberdein, M. D., Syracuse, N. Y.

IN these days of advancement in scientific research, there is a field for original investigation in materia medica and therapeutics in this country. The American profession are too apt to follow the lead of their more enterprising foreign brethren, or perhaps of the native eclectic school. In fact, nearly all the leading introductions within the past

twenty years, either in the form of vegetable or mineral remedies, owe their origin to the investigations of the foreign profession or the eclectic physicians of this country.

From a foreign soil we have received chloral hydrate, nitrite amyl, salicylic acid, chloroform, eucalyptus globulus, guarana, coca, folia carobæ, coto, jaborandi, boldo and Jamaica dogwood. From the eclectic school we have received podophyllin, leptandrin, hydrastin, phytolaccin, juglandin, cotton root, berberis aquifolium, cascara sagrada, cereus grandiflora, five-flowered gentian, penthorum sedoides, rhus aromatica, yerba reuma and yerba santa, while to native regular sources we trace a re-discovery of properties long well known in connection with black haw, evening primrose, ustilago maidis, etc. The vast American continent is replete with a varied vegetable growth, comprising many valuable medicinal plants, not a few of which are without doubt at present unknown to the profession as remedial agents. Note for example the valuable collection of medicinal plants recently introduced to the medical world from the Pacific coast, many of which are of great value. I am frequently surprised at the great reluctance manifested by many practitioners to test a new remedy. It is conceded that most medical men of large practice and long experience, either from lack of time or incredulity, are willing to wait for young and inexperienced men to test a new preparation before being led to try it themselves, and then, frequently, will exhibit it in the most stubborn case they have at hand, often endeavoring to cure the incurable, and upon experiencing the inevitable failure consequent upon such a course, the remedy is condemned, and the writer, who has honestly given to the world his experience with the article in question in a number of carefully watched cases, as well as the unfortunate manufacturing house who has recommended it, is soundly berated.

Thus it is that new and valuable remedies are often put to an absurd test and condemned consequently as useless, because of their failure to accomplish the impossible. Again, there is a manifest reluctance on the part of many influential men to report their experience with a new remedy, evidently from fear of criticism. We are, therefore, frequently obliged to receive the statements of obscure and often illiterate men who are anxious to appear in print, and whose statements may be frequently taken *cum grano salis*. It would be a matter for congratulation if it were possible to eliminate from the professional mind, entirely, the idea that the sole object and aim of a reputable manufacturing house is to foist some new preparation on the market, regardless of its intrinsic value, and to replace it with the conviction that they are engaged in an honest search after the truth, and in an endeavor to add to the list of valuable remedies against the "many ills to which flesh is heir." This is the feeling which certainly should obtain, and that which is justified by the fact that no manufacturing house would dare, as it values the reputation which is its capital, to foist on the profession a worthless article, or even one of doubtful merit.

Abstracts and Translations.

[From the British Medical Journal, Oct. 11, 1879.]

Salicylic Acid in the Treatment of Diabetes.

Dr. Schætzke publishes in the Berliner klin. Wochenschr. for June 2d, 1879, the history of three cases of diabetes successfully treated by salicylic acid. The first case was that of a lady, aged 50, who had for eighteen months been under treatment for chronic gastric catarrh. Her father, sister and husband had died of tuberculosis. When she was seen by the author, he at once suspected diabetes from the excessive thirst, polyuria, caries of the teeth, etc. The urine was examined and found to contain sugar; the specific gravity was 1038. The patient was treated with salicylic acid, 3 grammes (45½ grains) being ordered to be taken three times daily for three days. On the first day, however, she felt giddy, and had nausea. On the second day she vomited once, her hearing was affected, and her gait became unsteady. The dose was therefore reduced from 9 grammes daily to 3 grammes. Owing to her intolerance of salicylic acid, Herr Schætzke sent her to Carlsbad. On her arrival there the urine was found to be perfectly free from sugar, and remained thus both during her cure and afterwards. The second case was that of a man, aged 58, who probably had been suffering from diabetes for the last two years. The urine contained a considerable percentage of sugar. As the patient could not be prevailed upon to go to Carlsbad, he drank the waters at home, but without much benefit. Herr Schætzke again resolved to try the salicylic acid, beginning, as in the first case, with 3 grammes three times a day. This patient also evinced great intolerance of the drug. It was, however, continued for two weeks, in doses of 3 grammes daily during the first week and 2 grammes the second week, when the sugar disappeared from the urine and did not reappear. The other case was that of a girl, aged 26, who had been suffering from colic for years. She was treated in the same way as the other patients, but was obliged to discontinue the treatment after the first four days, owing to her intolerance of the drug. A week later another attempt was made with a dose of 2 grammes daily; this was continued for a fortnight, when the urine remained free from sugar. It is curious that in every one of these cases the patients should have been so intolerant of the salicylic acid. Could this phenomenon be in any way connected with their disease? And if so, in what way? Three cases can scarcely be regarded as sufficient to establish the reputation of salicylic acid as a cure for diabetes, but the subject is worthy of being investigated.

The Effects of Chloroform, Ethidene and Ether on Blood-Pressure.

The Committee of the British Medical Association on the Action of Anæsthetics report (British Medical Journal, June 21, 1879) that the facts obtained from their researches seem to warrant the following:

1. Both chloroform and ethidene administered to animals have a decided effect in reducing the blood-pressure, while ether has no appreciable effect of this kind.

2. Chloroform reduces the pressure more rapidly and to a greater extent than ethidene.

3. Chloroform has sometimes an unexpected and apparently capricious effect on the heart's action, the pressure being reduced with great rapidity almost to *nil*, while the pulsations are greatly retarded or even stopped. The occurrence of these sudden and unlooked for effects on the heart's action seems to be a source of serious danger, all the more that in two instances they occurred more than a minute after chloroform had ceased to be administered, and after the recovery of the blood-pressure.

4. Ethidene reduces the blood-pressure by regular gradations, and not, so far as observed, by sudden and unexpected depressions.

5. Chloroform may cause death in dogs by primarily paralyzing either the heart or the respiration. The variations in this respect seem to depend to some extent on individual peculiarities of the animals; in some the cardiac centers are more readily affected, in others the respiratory. But peculiarities in the condition of the same animal very probably have some effect in determining the vulnerability of these two centers respectively, and they may both fail simultaneously.

6. In most cases respiration stops before the heart's action; but there was one instance in which respiration continued when the heart had stopped, and only failed a considerable number of seconds after the heart had resumed.

7. The use of artificial respiration was very effective in restoring animals in danger of dying from the influence of chloroform. In one instance its prolonged use produced recovery, even when the heart had ceased beating for a considerable time.

8. Under the use of ethidene there was on no single occasion an absolute cessation either of the heart's action or of respiration, although they were sometimes very much reduced. It can, therefore, be said that, though not free from danger on the side of the heart and respiration, this agent is in a very high degree safer than chloroform.

9. These results confirm and amplify those stated in a previous report, to the effect that ethidene does not compromise the heart as does chloroform. By the method of experimentation then employed, the effect on the blood-pressure could not then be determined; and altogether the results here obtained are more exact and unequivocal.

[From the British Medical Journal, Oct. 25, 1879.]

The Treatment of Scabies.

Dr. Liveing believes that the most common error in regard to the treatment of scabies is that of using sulphur ointment too strong, and of continuing its use for too long a period. Of all remedies not one is so effectual as sulphur ointment properly applied. An ointment half the strength of that of the British Pharmacopœia is quite strong enough, and the best time to use it is at night, when it should be rubbed all over the body, except the head, but especially on the hands, buttocks, and lower parts of the abdomen. The underclothing used during the previous day, namely, the socks, gloves, drawers and jersey, should be worn during the night; this thoroughly disinfects the clothes, and at the same time keeps the ointment well applied to the skin. In the morning a warm bath may be taken, and no treatment followed during the day. For three nights this process should be repeated, but never longer; subsequently a little ointment should be well rubbed on the hands, wrists, and buttocks for a few nights. All treatment should then be discontinued for at least a week, when, if necessary, it may be repeated for one or two nights, or a milder ointment may be used. It is sometimes difficult to say whether a case of scabies is cured or not; under these circumstances it is very convenient to use an ointment which does not irritate or annoy the patient by its disagreeable smell, and which at the same time will complete the cure. A most excellent ointment of this kind is made with balsam of Peru (℥ ij ad ℥ j). The styrax ointment is also thoroughly effective, but less agreeable. With regard to sulphur baths, Dr. Liveing states that they are not nearly so effective as sulphur ointments. He lately ordered sulphur baths (as being more agreeable than ointment) for a pupil of his own who was suffering from scabies; six or seven were taken, and the patient then returned much better but not cured; more baths were ordered, but the patient did not again present himself. He had in all fifteen baths, and then went home to the country thinking himself cured; unfortunately he was not, and he conveyed scabies to his family. This is not the first time that sulphur baths have been found to fail. They are, however, useful under certain circumstances, as in cases where it is very inconvenient to apply sulphur ointment at night. Again, in cases where there is much secondary eczema set up with extensive excoriations, the application of sulphur ointment is very irritating. Under these circumstances it is very useful to begin with a few baths, which generally produce an excellent effect. They may be followed up by the application of ointment to those regions known to be specially affected. Lastly, with regard to disinfecting outer clothes and bedding, it can easily be done by sulphur fumigation or baking. In all cases of long standing the clothes, blankets, etc., should be disinfected, but it is unnecessary to extend this to the bed itself.

[Dr. J. B. Read in American Journal of Pharmacy.]

The Saw Palmetto—(Sabal serrulata*).

Botanical Description.—Stem creeping, branching; leaves circular in outline, fan-shaped, bright green, shorter than the slender plano-convex, more or less spiney-edged, petiole. The numerous (15 to 30) erect divisions slightly cleft at the apex, and without thread-like filaments in the sinuses; spadix densely tomatose, much shorter than the leaves; petals scarcely united; style slender; drupe ovoid, oblong (*S. minima*, Nuttall, *Chamærops*, Pursh.). Sandy soil in the lower districts of Florida and South Carolina. June. Stem 4° to 8° long; leaves 2° to 4° high; drupe black, 8″ to 9″ long.—*Chapman.*

History—This plant grows abundantly in the sandy soils of the sea coast and sea islands of South Carolina, Georgia and Florida, and may, perhaps, extend into Alabama, Louisiana and Texas. The belt of territory inhabited by it stretches inland from the coast eight or ten miles. The nearer the sea, the more vigorous the luxuriance of its growth. Like most crops, its fruit is more abundant in alternate years. It is the common plant of the section of the

* Sabal levistona? *Feay.*

country in which it grows, forming palmetto scrubs which extend in unbroken range for hundreds of miles, and are, from their density and the saw-like edges of the leaves, almost impassable to human beings. The beach, extending from Mosquito Inlet in Florida to Jupiter Inlet, is one vast scrub, over 100 miles long and from one to three miles wide, broken only by live oak hummocks along the creeks and inlets. The cutting of roads through these palmetto scrubs is not one of the least of the labors new settlers have to undergo.

In addition to the description of the plant above given, we may add that it has large fibrous roots extending for several feet from the stem, which, being half exposed above the sand, render traveling in spring vehicles almost an impossibility.

The saw palmetto is of great use to the inhabitants. With the leaves they form a substantial thatch for their houses, and hunters can readily make from it convenient huts that last for years. The leaves are also collected, dried, put up in bales and sold for paper stock. The tough, fibrous roots, resembling in texture the husk of the cocoanut, are easily formed into scrubbing brushes. These roots contain a large amount of potash salts, and may be in time a source of that valuable alkali.

The saw palmetto berries, or more properly drupes, ripen in October and November, and may be found until the middle of December. They are about the size of the olive, dark purple in color, and contain a large quantity of juice and a pit, shaped like that of the olive. The berries are at first exceedingly sweet to the taste, but in a few seconds this is followed by an acrid, pungent sensation that spreads to the fauces, nasal mucous membrane and larynx. This is in turn succeeded by a feeling of smoothness in all those parts, as if they had been coated with oil. The general impression is that of a sweet and decidedly strong, though not unpleasant butyraceous taste, which increases with the age of the fruit. The seeds are enveloped in a tough, fibrous membrane, are very hard, and when cut open, present a white, oily, glistening substance, which burns readily with a blue flame, and gives off the odor of roasted coffee.

The oil, or rather oils—for there are two—a volatile oil, soluble in alcohol, and a fixed oil, are obtained from the expressed juice by allowing it to stand for some time. In a few days the oils rise to the surface, and the liquid is resolved into three layers; first, a yellow volatile oil, next, a thicker, grayish-brown fixed oil, and then a yellowish watery fluid containing a large percentage of saccharine matter, richer in fact than cane juice itself. By evaporation this fluid yields a rich golden syrup, which neither ferments nor candies, slightly retaining the peculiar taste of the fruit. When the berries are boiled in water, the volatile oil is dissipated, filling the atmosphere for a great distance with its pungent vapor, and producing dizziness and headache in those in the immediate neighborhood.

The residue of seeds and husks, when ground up, forms an oil cake which is greedily eaten by many animals, and fattens more speedily than that of rape or flaxseed.

Medical Uses.—From the above account of some of the properties of this plant, its application as a remedial agent seems warranted. In all cases where a highly nutritive agent is needed, it seems to apply well and to fulfill the indications. By its peculiar soothing power on the mucous membrane it induces sleep, relieves the most troublesome coughs, promotes expectoration, improves digestion, and increases fat, flesh and strength. Its sedative and diuretic properties are remarkable. It has been used with benefit in cardiac asthma, phthisis (especially laryngeal phthisis), chronic bronchitis, and dilation of the bronchial tubes. Its action in catarrhal affections is rapid and permanent. A cold in the head may be abated by two or three doses. Mixed in boiling water, and used by inhalation, it has been found very beneficial in chronic ozena.

Considering the great and diversified power of the saw palmetto as a therapeutic agent, it seems strange that it should have so long escaped the notice of the medical profession. Several years ago, while on a hunting trip in the wilds of Florida, my attention was drawn to the great fattening properties of the berries, and the peculiar quality of the fat of the animals that feed on them. Most animals in the palmetto region are very fond of the fruit. During the summer months in these parts the supply of food is scanty for such animals as bears, racoons, opossums and hogs, and they have to work hard to eke out a living from roots and such animal food as they can find on the sea coast—as turtle eggs and dead fish—and they consequently become very thin. As soon, however, as the palmetto berries begin to ripen, they improve rapidly, and in a few weeks have acquired an enormous quantity of fat, so as to become so unwieldly that they are an easy prey to the hunter. This fat, like that of mast eating animals, consists principally of olein, and will not make lard. The berries, when dropped into water, are seized and eated with avidity by the fishes. Even the natives frequently acquire a taste for the berries and eat them freely.

[From Pharmaceutical Journal (London, Eng.), Nov. 15, 1879.]

Drug Smoking.

The following remarks and formulæ are extracted from a paper on "The Therapeutical Value of Drug Smoking," especially in reference to asthma, which appeared in the Practitioner for August.

The chief difficulty in treating an individual case of asthma arises from individual peculiarities, which makes the choice of the appropriate neurotic a matter rather of hap-hazard selection, numerous experiments being sometimes necessary before an indication is obtained as to the special drug required; one drug will have a so-called magical effect in one case which may prove inert when used in another, and hence in endeavoring to meet the exigencies of a number of individuals it becomes necessary to combine a number of remedies, and such a combination of drugs becomes more universal in its application in proportion to its complexity, the chance of its proving effectual in any individual case being greatly enhanced by such a composition.

It is a matter of some difficulty to analyze with any certainty those mixtures of vegetable and other substances which are sold as remedies for asthma, but an examination of them shows conclusively that they are composite, different leaves being found on submitting any sample to microscopical analysis; some of them contain opium, others do

not; most of them contain lobelia, and it may be stated with some certainty that all of them have stramonium for their basis.

If such remedies are tried in a number of cases it is surprising how one remedy at one time appears to be of the greatest service, another at another time; much depends, doubtless, upon the method of preparation and preservation, and upon the care with which the drugs are selected, and the best secret remedy I know (Himrod's) is evidently well prepared and preserved, the leaves of which it is composed being fresh and green.

Remedies for asthma are supplied in three forms: A powder which is burnt and the fumes of which are inhaled, cigarettes composed of tobacco combined with various drugs, or of paper dipped in a solution of the drugs.

The best method of preparing the drugs for the powder form of remedy appears to me to be this: The leaves of the vegetables used should be procured in good condition and perfectly fresh; they should then be soaked in a solution of nitre (25 per cent.), and the leaves then dried by gentle heat and powdered. I have made use of the various neurotics in this manner in asthma, first separately, in order to ascertain the individual value of the remedy, and then in combination, and the experiments have now been carried on for many months, and I am disposed to place them in the following order of merit: Opium, stramonium, cannabis Indica, conium, lobelia.

The first three on the list appear to be the most potent by fumigation, but when administered in the wet method (if I may use the term) cannabis Indica is so uncertain and so apt to produce delirium, especially in women, that I prefer conium, a drug from which I have obtained extremely good results when administered by the mouth.

With belladonna I could not satisfy myself that any good results were to be obtained by fumigation, and I consider it far inferior to those given above in whatever way it is administered.

The powder may be used by those patients who are not accustomed or object to smoking cigarettes, or it may be added to the tobacco of those who prefer the use of the pipe.

As regards the composition of the powder, I have had good results from gr. ix of stramonium and gr. j of cannabis Indica, this being a quantity which will cover a shilling, sufficient for one fumigation.

But if the patient does not object to smoking, I much prefer to administer the remedies in the form described in my previous paper, namely paper cigarettes impregnated with tinctures so that the dose may be accurately apportioned.

It will be understood that in suggesting remedies which serve to alleviate the spasmodic dyspnœa of asthma I do not consider that they constitute a mode of treatment calculated to improve the general condition of the patient, or that they are more than palliatives of an urgent symptom: constitutional treatment by ferruginous tonics and cod-liver oil, or it may be by iodide of potassium or arsenic, must be resorted to, if it be intended to give the asthmatic patient permanent relief from distressing disease. With acute conditions of the disease, with bronchial complications of such a nature as to contra-indicate the use of iron, there is probably no treatment better for a majority of cases than the use of iodide of potassium with stramonium; in many cases of like character I have derived very good results from the administration of hemlock in combination with hypophosphite of soda, but for the prevention of the disease I know no treatment to compare with iron and cod-liver oil.

But for soothing and diminishing the dyspnœa, neurotics may be used with great effect, and the following combination is that which, up to this time, has given me the best results.

The same form of cigarette is used as described in my former contribution on this subject, and the paper is soaked in the following drugs according to the recipe here given:

Extract of Opium, gr. 1-64.
Extract of Stramonium, gr. 1-32.
Tincture of Indian Hemp, ♏ ½.
Tincture of Hemlock, ♏ 1¾.
Tincture of Lobelia, ♏ 1¾.
Tincture of Tobacco, ♏ 9.
Oil of Anise, ♏ ⅛.
Nitre, gr. ¼.

Or for a sheet of Swedish paper sufficient to make sixty-four cigarettes the formula may be given thus:

Tincturæ Tabaci, ʒ x.
Tincturæ Conii, ʒ ij.
Tincturæ Lobeliæ, ʒ ij.
Tincturæ Cannabis Ind., ♏ xxxii.
Extract. Opii, gr. j.
Extract. Stramonii, gr. ij.
Olei Anisi, ♏ viii.
Potassæ Nitratis, gr. xvi.
Spr. v. r., ad ℥ ijss.

This formula, which is a complex one, has only been obtained from repeated experiments, leading step by step to the addition of some effective remedy, and to the elimination of less effectual drugs.

As it is sometimes desirable not to give opium or Indian hemp, I have had cigarettes made with stramonium and lobelia only; so that I have three different kinds for use: opium cigarettes, containing a small quantity of opium and stramonium; a compound opiated cigarette, containing the drugs given in the formula above, and a Stramonium cigarette without opium.

[Dr. Charles Symes in Pharmaceutical Journal and Transtions, London, Eng.]

Baycuru.

Baycuru or biacura is the vernacular name given to a plant growing on the shores of the Rio Grande. It imbeds itself more or less in the sand, a number of radical leaves rising above, and being some five to seven inches in length by one and a half or two inches in breadth. The flower resembles that of the London pride (*Saxifraga serratifolia.*) The whole plant is sometimes covered by the sea for days and even weeks together, dependent on the direction of the wind, there being no tides in this locality. I am indebted to Mr. Thomas Hallawell for a specimen of the root, and also to Dr. Landell (both residents of Brazil) for reliable information as to its medicinal properties and uses to which it is applied. I do not find mention of the plant in Chernoviz's "Formulario ou Guia Medica," which is practically the Pharmacopœia of Brazil, or any botanical work at my command. Mr. Holmes has also kindly searched in the Pharmaceutical and British Museum libraries, but has found no satisfactory information concerning it.

From a sample, however, with the foregoing description he believes it to be *Statice*, probably *Statice Braziliensis*, and although the plumbaceæ are not generally inhabitants of tropical climates, some do exist there, and from the marked resemblance of the chemical and medicinal properties of these and baycuru it seems very probable that the above conclusion is correct. Further specimens are promised, including a flower, which will of course be more satisfactory for its identification.

The root is the part used medicinally, both fresh and dry. In the latter state the pieces are six or seven inches in length, from one-third to one inch in thickness, and tortuous in shape. The cortical portion is thin, of a dark chocolate color, contrasting markedly with the central portion, which is of a flesh color in some pieces, in others darker; the former has an acrid astringent, the latter a purely astringent taste, which suggest the probability that the acrid resin exists in the cortical portion only. The natives have an unlimited amount of faith in its virtues as an astringent and discutient remedy in all kinds of enlargements and glandular swellings, externally as a fomentation, and frequently as a vapor. It is also prescribed by the medical men, not as a specific, for Dr. Landell tells me he has sometimes found it to fail utterly, but as a rule it is reliable both externally and internally, and forms a valuable astringent gargle. The sample which arrived quite recently was only small, and therefore for want of both time and material, I have been unable to make as complete a chemical examination of its constituents as could have been wished; nevertheless I will submit the principal results obtained. The process followed was that recommended by M. Fleury for proximate organic analysis (*Journal de Pharmacie et de Chemie*, 1872), which with some modifications is that of Dr. G. C. Wittstein (*Anleitung zur chemischen Analyse von Pflanzen*).

The substance to be examined is dried to ascertain the amount of moisture present, powdered, and percolated to exhaustion with anhydrous ether, absolute alcohol, cold and hot water, dilute chlorhydric acid, and solution of potassa respectively, the residue being dried and weighed between each operation. Fresh portions are then distilled with water, dilute acid (preferably phosphoric), and milk of lime.

The ethereal solution first obtained might contain all substances soluble in that menstruum, such as fats, resin, wax, volatile oil, alkaloids, glucosides, etc.; it is concentrated and agitated with a little water, allowed to repose, and the different layers are examined for these substances.

The alcoholic percolate is evaporated to dryness, agitated with water, etc., and the other solutions are examined for such constituents as they may contain, starch, gum, dextrine, albumen, salts, sugar, etc., each being tested by the usual re-agents for alkaloids, and although I obtained reactions, and even a minute quantity of crystals, which possessed the characteristics of an alkaloid, I cannot regard its existence as actually proved, and must await the arrival of further supplies for its verification. The activity of the root, partly, if not chiefly depends on tannin, of which it contains about 12.5 per cent., and its greenish colored reaction with iron salts indicates that it belongs to that variety known as mimotannic acid. It also contains 1.3 per cent. of acrid pungent resin, soluble in ether and alcohol; a small quantity of volatile oil; a resinous substance, insoluble in ether, soluble in alcohol; proteic and pectinaceous bodies, starch, coloring matter, chloride and sulphate of sodium, potassium, a soluble silicate, and 14 per cent. moisture. The ash, 4.5 per cent., consists chiefly of soda and silica.

Pharmaceutically the infusion (℥ss to the pint) and proof spirit tincture (1 to 10) appear to be the best preparations, the dose of the former being one ounce, of the latter one to two drachms. An aqueous extract, of which it yields one-third its weight, contains all the astringent properties, but an alcoholic extract contains the acrid resin on which I presume its discutient properties more or less depend.

In conclusion, I would call attention to the apparatus recommended by M. Fleury for the exhaustion by ether and alcohol. It is not new, and is usually mentioned as an apparatus for continuous distillation; but this is really a misnomer, inasmuch as the percolate, and not the distillate is the object for which the process is conducted. I have here a rough sketch of it, my object being partly to point out that it is not altogether the most convenient form, but with some slight modifications it answers the purpose admirably, economising both time and menstruum. An apparatus differing somewhat in form, but of the same character, for manufacturing purposes is illustrated, described, and recommended in Dorvault's "L'Officine," p. 1265.

[Abstract from a Paper on the use of Duboisine in Ophthalmic Practice, by H. Macnaughton Jones, M. D., M. Ch., Professor in the Queen's University in Ireland; in the British Medical Journal.]

Results of Experimental Researches to this Date with Mydriatics and Myotics.

Duboisine (*Mydriatic*).—Alkaloid found in the leaves of a shrub, the *duboisia myoporoïdes*, native of New Guinea, Australia, and New Caledonia: nat. order scrophulariaceæ (Endlicher); solanaceæ (Bentham and Hooker). It forms a link between both. Duboisine resembles atropine, and may be identified with it.

[The first experiments with this powerful mydriatic performed in Europe were undertaken in December, 1877, by Mr. John Tweedy, at the request of Dr. G. Fortescue, of Sidney, New South Wales. The Lancet for March 2nd, 1878, (vol. i, pp. 304-306), contains an interesting account of Mr. Tweedy's investigations, as well as an elaborate and complete report on the general physiological action of duboisia, prepared by Dr. Sidney Ringer.

The mydriatic properties of duboisia myoporoïdes were in the first instance, accidentally discovered by Dr, Joseph Bancroft, of Brisbane, while pursuing, at the suggestion of Baron von Mueller, some investigations elucidatory of the action of "pituri," a stimulating narcotic chewed by the natives of Central Australia. Dr. Bancroft related the circumstances under which he came to discover the mydriatic properties of duboisia myoporoïdes, in a paper read before the Queensland Philosophical Society in October, 1877. In order that the subject might be more completely investigated, Dr. Bancroft seems to have submitted some of the extract of duboisia to Dr. Fortescue, who in his turn forced it to Mr. Tweedy.

This gentleman says: "It will be seen from Dr. Ringer's elaborate report that the physiological action duboisia is apparently identical with that of

atropia. The same remark applies to the effects of the local application to the eye. If there be any difference, it is that duboisia is more prompt and energetic than atropia, and certainly very much more so than the strongest extract of belladonna."

Of a watery solution of the extract (one in twenty), Mr. Tweedy says: "The resulting dilatation of the pupil usually lasted from six to ten days; and the concomitant paralysis of accommodation, which in every instance became rapidly complete, about three or four days; it then gradually subsided; so that, about five to seven days after the application, the accommodation was as strong and active as before. The pupil in all cases was affected sooner, and recovered later, than the accommodation."

By employing the drug on his own eye, Mr. Tweedy found that the pupil became fully dilated in fifteen minutes; and that, during the same period, the nearest point of distinct vision receded from four to ten inches from the eye. In twenty-five minutes ordinary small print could not be read at any distance with the unaided eye; so that in this comparatively short time a high power of accommodation for near objects was practically abolished. By more delicate tests, however, it was found that the effect went on increasing for four hours, when it attained its maximum. After about thirty hours, the power of accommodation began to declare itself, and in four days was completely restored.

Employed subsequently in all cases in which atropia was indicated, such as injuries and diseases of the cornea, iritis, spasm of accommodation, etc., it was always beneficial in its action, and in some instances superior to atropia.

Since these experiments, an alkaloid (duboisine) has been obtained, but its action has been found to correspond with that of the extract. All observers seem to corroborate Mr. Tweedy's statement that duboisine is a more rapid and more powerful pupil-dilator and accommodation-paralyser than either belladonna or atropia.

Mr. Tweedy has lately informed me that, after repeated trials, he is disposed to prefer a watery solution of the extract to the solution of the alkaloid. The former is, he says, painless, and quite as prompt and powerful as the latter, and has, moreover, in his experience, never been attended with that feeling of giddiness, or those symptoms of mild delirium, that sometimes undoubtedly occur when the alkaloid is frequently used.]

Mr. A. W. Gerrard (Pharmaceutical Journal, April 6th, 1878, and Journal de Pharmacie, tome xxvii, p. 405) gives the following differences between duboisine and atropine. 1. Duboisine is twice more soluble in water. 2. Duboisine is a more energetic base (lower molecular weight). 3. Their reaction with *concentrated sulphuric acid* differs. 4. Atropine, heated with *hydrate of barytes*, gives an odor like hawthorn-flowers; duboisine, similarly treated, emits a disagreeable odor. They behave alike when heated: the vapor condensed looks like transparent varnish. The only salts of duboisine Mr. Gerrard obtained in the crystalline state were the sulphate and hydrobromate.

Mr. Holmes (Pharmaceutical Journal, March 9th, 1878), says duboisine has the same action as atropia and datura stramonium.

Dr. Ringer (Lancet, March 2d, 1878), says that the action of duboisine is as energetic and as rapid as that of atropine. It dilates the pupil; dries the mouth; suspends the secretion of the skin; causes headache and drowsiness, and increases the pulse. It is antagonistic to muscarin. After some days' administration, it produces tetanus in frogs.

Mr. Tweedy finds no difference between the action of duboisia and belladonna. Duboisia is more rapid and energetic than belladonna. [The cause may be that the leaves of the duboisia contain more alkaloid, or the extract is better made. H. M. J.] For use, the extract, dissolved in twenty times its weight of water, acts better than concentrated extract.

Dr. W. K. Sullivan suggests that atropine is identical with duboisine ("seems undoubtedly to be only atropine"). Its behavior with tannin iodhydrargyrate of potassium, chloride of gold, bichloride of platinum, sulphocyanate of potassium, mercuric chloride, potash, soda, and ammonia is the same as that of atropia. Experiment may prove it a different body, but containing closely related homologues of the radical atropine.

[From Chicago Medical Gazette, by Dr. James I. Tucker, Chicago.]

Remedies of Vegetable Origin.

Having used and carefully tested the therapeutical value of the following remedies, I desire to submit to the medical profession my observations and some practical suggestions concerning them. My own experience, founded upon the critical observance of phenomena, convinces me that they should have more extended application in medicine.

Cactus Grandiflora.—This well known flowering plant is not mentioned at all by Stillé and Maisch, and only a very brief notice is given it in the United States Dispensatory, and yet to my certain knowledge it is one of the very best remedies for functional derangements of the heart. The administration of digitalis at the bedside requires the most vigilant supervision; how unsafe, therefore, must it be to prescribe it for one who casually drops into your office to get a prescription for cardiac disorder! But the use of digitalis and kindred agents is rendered unnecessary in view of the fact that we have in cactus a potent and innocent medicine. We should not wilfully disregard the *tolle causam* of Hippocrates and his disciples, but it is pardonable if we do lose sight of it sometimes, for causes do not always lie on the surface—they are often inscrutable. I use cactus in the conditions which may be called the "tobacco heart," and the "tea" or "coffee heart," as well as in cardiac palpitation of an emotional origin. How wide a therapeutic range cactus has is not yet known.

Rubini's tincture is made of 120 grammes of the fresh stems and flowers and a pint of alcohol of ninety-five per cent., macerated a month and filtered (United States Dispensatory). The dose is from ten to thirty centigrammes, but I have often given as much as two grammes of the inconstant tincture commonly found in the drug stores. Certainly a more definite formula is necessary.

Betonica officinalis.—This is one of the tribe of stachydiæ, indigenous to southern Europe and found sparingly in New England. But little mention of it is made in the works on materia medica, and it

is very little in use. It is certainly useful in chronic hepatic derangements. It quickens the functions of the skin and kidneys, removes œdema of hepatic origin, and, by virtue of its general tonic properties, restores the harmony and tone of the circulation. The bitter principle, which is probably common to all these tribes, and the possible embodiment of an important alkaloid, has not yet been isolated. My experience with this medicinal plant is comparatively limited, but I have used it in a sufficient number of test cases to lead me to believe in its efficacy.

It occurs in the National Dispensatory under the head of "Leonurus," but in the United States Dispensatory the tribes are noticed separately. It may be given in decoction or tincture. Of the latter form the dose is from one to four grammes.

Colocynth.—I have at other times and in other places written about the *tincture* of colocynth. For the purposes for which this drug is generally used this form of preparation is much inferior to the powdered pepo or the extract, which, also, is used in the majority of cases in combination with other drastic purgatives. With this I have nothing to do at present. What I wish to draw attention to anew is the power the tincture has, when properly administered, to allay intestinal colic, that form, especially, which probably belongs to the acute visceral æsthesio-neuroses. But I insist that the dose shall be small and frequently repeated. I do not add more to the vehicle than enough to give it a not unpleasant but decided bitterness. I have seen opium and belladonna aggravate this complaint when colocynth acted like a charm. There is no doubt, I will remark in passing, that there is a great difference in the small and large doses of the self-same medicine, which renders their operations diametrically opposite. It is important, therefore, to learn the new therapeutic powers of the old drugs as well as to inquire into the properties of the new. This opens up a wide field of investigation.

Pulsatilla.—Pulsatilla is rapidly growing in favor with many practitioners. Though a very old remedy, having been known to Dioscorides and Pliny, it fell into disuse, if not into disrepute, and was not reinstated till about the beginning of the present century. I have used pulsatilla mainly in simple dysmenorrhœa, and here it has proved of decided utility. Its scope is, however, doubtless much wider. A very prominent lawyer of this city told me not long since, that after trying the bromides, the valerianates, and other remedies of repute for the headaches caused by excessive mental application, he found no relief till he made use of the tincture of pulsatilla. He is now never without it, and uses no other medicine for the cure of his headaches, which I know to be very severe. No such powers are attributed to it in the books to which I have access. This is an exceptional case, it may be, but it is a valid one.

The tincture of pulsatilla should be made from the fresh plant, and given with caution. The dose is from three to ten drops.

*Bursa pastoris.**—Another medicinal agent of vegetable origin, and the last to which I intend to call your attention just now, is the bursa pastoris, or shepherd's purse, one of the cruciferous plants native to Europe, but extensively naturalized in this country. I used it at first to relieve the incontinence of urine in aged people, especially women, and was surprised and delighted at the promptness of its action in the removal of this troublesome complaint. Latterly I have extended its use so as to cover many of the disorders of the urinary apparatus, notably cystic irritability and some forms of chronic disease of the kidneys. Though it is mentioned by Stillé and Maisch as a stimulant to promote menstruation, it was by accident that I learned that it possessed this power. A lady had not menstruated normally for two or three years, and therefore, when I was treating her for urinary disorder, she did not think it worth while to mention the fact. At the next catamenial period, to her surprise, she menstruated profusely, and asked me if the medicine she had been taking had anything to do with it. I did not know, but since then I have frequently had opportunities to demonstrate its emmenagogue properties. Strange to say, it is also hemostatic, and is used in menorrhagia and hæmaturia.

The dose of the tincture is thirty drops four to six times a day.

* *In re* BURSA PASTORIS, Dr. H. G. Piffard, of New York, sends me the following quotation from *Morandes Historia Botanica, etc.*, 1761, *p.* 89: "*Hinc valet in hemorrhagia narium, exspiritione sanguinis, diarrhœa, dysenteria, mictione cruenta (gonorrhœa), fluxa nimio mulierum.*" There is nothing new under the sun.

Correspondence.

For Gonorrhœa.

Dr. H. B. Stanley, of Arbuckle, California, is partial to the following prescription in gonorrhœa:

℞. Fl. ext. cubebs,
Fl. ext. yerba santa,
Balsam copaiba,
Syrup acacia, ♎ ʒss,
Comp. spts. lavender, ʒij.

M. Sig. A teaspoonful three times a day. The Spaniards, it is said, treat gonorrhœa by chewing the leaves of the yerba santa.

Collinsonia Canadensis.

My experience with this remedy leads me to regard it as a specific in that form of pharyngitis known as preacher's sore throat. I order a mixture containing equal parts of the fluid extract (representing ounce for ounce) and simple syrup, of which the dose is a half teaspoonful four times a day.

It is also of benefit in chronic bronchitis, and in phthisis, allaying the irritation and troublesome cough. One advantage of its use in cough mixtures lies in the fact that instead of impairing digestion, as most other cough remedies do, it acts as a tonic, stimulating the appetite and improving digestion.

J. F. ROUGHTON, M. D.

GREENVILLE, Alabama.

Yerba Reuma.

I am delighted with my success in the use of yerba reuma. I have used it in catarrhal affections, leucorrhœa, gonorrhœa, and gleet with the utmost satisfaction. In the latter affection it is my "sheet anchor." I have cured the most difficult cases of gleet—one, in particular, of twelve years' standing in a gentleman who had been under the observation of the most distinguished surgeons of America without any effect. I put this patient immediately upon yerba reuma, without any constitutional treatment, and in a few days a perfect

cure was effected. I consider the profession under great obligations to those who have placed in their hands an agent of so much value.

JOHN CASS, M. D.

HAMILTON, Ohio, Jan. 6, 1880.

Fluid Extract Cascara Sagrada.

I have received a specimen of the above-named pharmaceutical preparation and have submitted it to careful trial, personally, in private and public practice. I find it to be an admirable vegetable aperient and cholagogue which can be safely relied on. The bitter taste of the preparation can, in my experience, be covered effectually by combining it with extract of iquorice. The solid extract for exhibition in the pill form would be an improvement on the soft extract; may be inclosed in gelatine capsules. I can cordially recommend it to the profession as a valuable addition to our list of simple laxatives.

JOSEPH ROGERS, M. D.

Visiting Medical Officer Westminster Medical Infirmary; Medical Officer JuniorUnited Service Club.
LONDON, England, 33 Dean St., Soho, W.

Rhus Aromatica.

I desire to add my testimony in favor of rhus aromatica. From this remedy I have obtained very positive results. I administered it to a patient suffering from hæmaturia and chronic cystitis, after the complete failure of the ordinary remedies used in cases of this nature—ergot, gallic and sulphuric acid, and tincture ferri chlor.—with excellent results, controlling the hemorrhage in forty-eight hours. Continued the remedy in conjunction with small doses of extract sarsaparilla and benzoic acid for three or four weeks. The patient has gained steadily under this treatment and says that he has not felt as well in several years as he does at the present time.

CHAS. A. BALDWIN, M. D.

CONCORD, Jackson Co., Mich., Dec. 14, 1879.

Ammonium Picrate.

You inform your readers that you are always ready and willing to answer queries regarding new remedies. I desire to know how to change the picrate of ammonium from the coarse powder into a palatable liquid preparation. It is difficult to administer fractional grain doses of the coarse powder. Awaiting a reply through the journal, and wishing you the success you richly merit in your good work, I remain respectfully yours,

JOHN BILLINGS, M. D.

ANCONA, Ill.

[Ammonium picrate is soluble in water, but possesses an intensely bitter taste, which is a serious objection to its administration in the liquid form. It is possible, however, to overcome this bitterness to a degree which enables the palate to tolerate it at least as well as the elixirs of calisaya, which have met with such popularity. We submit a formula which will at the same time permit of the exact administration of small doses:

℞. Ammonii picratis, gr ij.
Aquæ, ʒ ij.
Extr. glycyrrhiz. fld.
Syr. simpl, āā f ʒ j.

Each fluid drachm of this mixture contains 1-16 grain of ammonium picrate, eighty minims will contain 1-12 grain, and two fluidrachms represent 1-8 grain. Doses of 1-2, 1-4 and 1-8 grain can also be obtained in the form of pills, ready-made, which is certainly the most desirable method of administration where the patient offers no objection. —ED. THERAPEUTIC GAZETTE.]

Coto Bark.

I was induced to subscribe for New Preparations, and now consider it invaluable and one of the indispensable periodicals in the hands of the progressive physician. Of the new remedies which I have fully tried I think coto bark worthy of commendation. I think it supplies a long-felt want in the treatment of infantile diarrhœa. 1. Because of the small amount required. 2. Because it is pleasant to take. 3. Because it is *effective*. I have used it in quite a number of cases, and was only once called upon to repeat the prescription for the same case. In this case the trouble was dependent alone upon an inflammatory condition. In cases where a vitiated bilious excretion was the exciting cause of the discharge, I found it necessary to precede the administration of the coto by several doses of syrup juglans cin., 10 to 30 m. (according to age) every three hours. Fluid extract coto and simple syrup do not make a nice preparation, but by substituting elixir simple for the syrup a nice pleasant preparation is the result. My prescription for children from 6 to 30 months is:

℞. Fl. ext. coto bark, ♏ 60.
Elixir simple, ʒ j.

M. Sig. A half teaspoonful every three hours. Gradually increase the dose if relief does not follow the first few doses.

A. L. HUSTON, M. D.

PENDLETON, Indiana.

Cascara Sagrada.

Having for several years been greatly troubled with constipation, I was induced to try the cascara sagrada. I began the use of it as follows:

℞ Fluid extract cascara sagrada.
Simple syrup, aa ʒ j.

M. S. take one teaspoonful three times per day, and I must say that it acted like a charm. It was but a short time until I had to take two doses only per day and again only one, when finally I concluded I was cured and stopped it altogether, but after a few months I had to return to it, but one dose per day now is sufficient. I have prescribed it in numerous other cases and it has universally given satisfaction. It is now a staple in our drug stores. I wish also to say that I have used the fluid extract of coto bark with good results, especially in the diarrhœa of typhoid fever.

E. W. BOYLES, M. D.

CLAY CITY, Ill.

Grindelia Robusta—Yerba Santa.

I have always been slow to "take up" with new preparations because I have thought our medicamentum armamentarium was complete with tried and proven remedies, fulfilling all the indications of the various diseases we were called on to treat, but since reading your journal regularly my suspicion was awakened to the fact that perhaps in some corners or creases on the "lap of earth" were concealed more potent agencies for the "healing of the nations" than have as yet been known; so to your enterprise and skill is the profession and the rest of mankind incalculably indebted. Your new preparations and additions to the materia medica are transcendently more valuable to the medical profession than is generally known and recognized, and in justice to your desserts I come forward with my voluntary testimonial to the

splendid virtues of grindelia robusta and yerba santa in treatment of asthma and bronchitis. Given in the proportion to two-thirds of one and one-third of the latter in cases of such character when chronic, nothing equals their efficacy. In fact the results from the first trial surprised me.

D. L. FIELD, M. D.

JEFFERSONVILLE, Ind.

Cascara Sagrada.

There has certainly been no lack of literature on this subject, and, doubtless, there is not a physician in the land who is not familiar, either from reading or from experience, with the properties of the drug. The reports have been so almost universally favorable as to create the impression that failure is impossible. Infallibility, however, is a rare property, whether of men or things, and our failures are frequently as instructive as our successes. The failure in a given case, of a drug whose success has been so uniform should lead to investigation which would establish more thoroughly the conditions of success, for all success is conditional. The report of the following case has had such an object in view: Mr. C. has suffered for five years from very obstinate constipation and its train of accompanying disorders. I first gave him a mercurial purge which relieved the headache and lassitude due to the retention of cholesterine. Following this he was put on quinine, iron, strychnia, arsenic and aloes, given in combination and in the form of capsules. This combination failing to secure the desired evacuation, I resorted to cascara sagrada, with which I had previously treated some ten cases of constipation very successfully. The commencing dose was fifteen drops three times a day; this having no apparent effect the dose was steadily increased until a teaspoonful three times a day was given, but still, though continued in the latter dose for over a week, no action was secured. This single failure has by no means destroyed my faith in the drug, but has clearly demonstrated that there may be conditions present, idiosyncrasy or something else, which render it, in common with all other medicines, inoperative.

F. D. THOMPSON, M. D.

SHERMAN, Texas, Jan. 1, 1880.

Progressive Medicine.

The era when calomel and Dover's powder formed the almost entire paraphernalia of the physician's office, is happily past. Time has made its impress on medical literature no less than on other branches of scientific effort, and it is indeed gratifying to notice the wonderful progress of medicine even in the last decade. Results have been attained, the possibility of which would have been doubted by our predecessors of the present century, and we no longer grope in the dark amid a multitude of high-sounding and obscure phrases. The advances of the past few years even have taught us to trust less to pet theories and more to practical demonstrations for our results. This is said by those morally inclined to be an age of doubt and skepticism, but looking from a medical standpoint it can very truly be called an age of facts. It is true that within our ranks there are yet a few men of some degree of eminence who adhere with wonderful tenacity to the theories of half a century ago, and carefully exclude from their minds all progressive ideas. But they are happily in the minority, and are growing beautifully less. Until recently medical literature was to some extent barren in proportion to its bulk, and originality succumbed to a reproduction of old ideas, and progressive thought yielded, through reverence, to the old theories. But to the observer there are marked and gratifying changes. Old remedies have been carefully sifted, and those which have nothing but age to commend them are being consigned to obscurity to give place to those more active and beneficial. In a few more years our science will have undergone a thorough regeneration, and be all the more powerful for combating disease. And amid the causes to which these gratifying results can be attributed, your excellent journal, together with your untiring efforts in behalf of progress, will not be lost sight of. These thoughts could be indulged further, but I forbear, having said what I have in justice to, and in acknowledgment of, your efforts in the line of progress. Yours truly,

J. B. CRANFILL, M. D.

TURNERSVILLE, Texas, Dec. 11, 1879.

Piscidia Erythrina—Manaca.

I have used the *piscidia erythrina* (Jamaica dogwood), in the following cases as an injection in acute gonorrhœa. In uterine colic, spasm, asthma, sick headache and colic, my conclusions are that it has an especial influence upon the sympathetic nerve.

As an injection in gonorrhœa, while it soothes for the time being, it is not at all caustic and excites the discha rge.

In two cases of uterine colic I obtained the most happy results, the patient going off into refreshing sleep and waking in the morning without any cerebral disturbance. In one case of nervous headache in which I tried it it did not produce sleep, although the patient took two drachms at one dose, producing a species of trance similar to that of the Indian hemp, being conscious of all the surroundings, yet unable to control locomotion. When the influence of the drug passed away, which was in about four hours, the patient arose entirely free of pain or nausea and attended a party in the evening with no inconvenience following the use of so large a dose of the drug.

In one case of asthma relief promptly followed the second dose and no succeeding attack has followed, three weeks having intervened.

A case of chordee and nocturnal erection, which did not yield to camphor or opium, was relieved by taking half a drachm of piscidia at bedtime.

My experience warrants me in believing the dose recommended by you is too small. I am giving it in half and drachm doses repeated every half hour until I get the full effects. and I have received no benefit from the small doses recommended.

I have given manacá only one trial with the most happy result. The case is a lady who is habitually subject to attacks of articular rheumatism. The foot and knee were badly swollen and extremely painful, the case having progressed three days before I was called. I commenced with five-drop doses and increased the dose to twenty drops three times a day. At the end of the first twenty-four hours there was a marked change for the better, and in three days the patient was around the

house superintending her work. At no time previous had she been able to get about under six to eight weeks.

I am satisfied that in piscidia and manacá we have two very important additions to our materia medica.

MARSHALLTOWN, Iowa. D. WINSHIP, M. D.

Ahl's Splints.

[We have to say in relation to the following correspondence that in publishing Dr. Finley's letter we did so because of the manifest imposition which the doctor's presentation of the case showed was being practiced on the profession. Having done so we cannot do less than to allow a reply. It is evident that Dr. Finley was imposed upon in his purchase of Ahl's Adaptable Porous Splint, but whether or not the manufacturer of the *Improved* Ahl's Adaptable Porous Splint is in any way responsible, let the subjoined decide. —ED THERAPEUTIC GAZETTE.]

DEAR SIR.—In the December number of your journal you have published a communication from Dr. J. H. Finley, of Streator, Ills. Inasmuch as he has chosen to do both the profession at large, and myself, harm by not stating the whole truth (of which he is perfectly cognizant), I would request that you publish the correspondence that passed between us on the subject, copies of which I herewith enclose. The original and press copies are at your disposal.

This correspondence explains itself fully without further comment from me at this time. Trusting that your sense of justice will cause you to publish said letters, I am very truly yours,

(Signed,) W. H. JOHNSTONE.

PHILADELPHIA, Jan. 16, 1880.

PHILADELPHIA, Dec. 15, 1879.

J. M. FINLEY, M. D., Streator, Ills.—*Dear Sir.*—Through the courtesy of Dr. D. G. Brinton, of the Medical Reporter, I learned of your displeasure regarding the manner in which Ahl's splints were sold.

In your letter to Dr. Brinton which you wished published, you say "that you wrote to my firm, and to Ahl, at Newville, and that you could not duplicate the pieces of your set, that you could only get them by buying a whole set." I cannot find among my whole list of correspondence any communication from you. While I have nothing to do with Ahl's old business in any way, I will sell you a set of my improved splints for thirty dollars and allow you five dollars for your old set when returned to me. After any surgeon has bought a set of my splints, he can get any single piece he wants by mail on receipt one dollar. Please let me hear from you. Yours very truly,

(Signed,) W. H. JOHNSTONE.

STREATOR, Ills., Dec. 22, 1879.

W. H. JOHNSTONE, Philadelphia, Pa.—*Dear Sir.*—Yours of the 15th inst. received. I have a new set of Ahl's splints, which cost me thirty dollars one year ago. Many of the splints I have never used. You are very generous in your offer. I suppose I must be deprived of those two splints simply because I did not buy of you. I will order again from Sharp & Smith, of Chicago, and if I cannot get them I will have your letter published in full, and will send to every physician in the State of Illinois, telling them about the transaction. It is worth as much as the splints cost me to get those two. I wrote to Dr. Ahl at Newville, Pa., and never received an answer. Yours resp.,

(Signed,) J. H. FINLEY.

PHILADELPHIA, Dec. 26, 1879.

J. H. FINLEY, M. D., Streator, Ills.—*Dear Sir.*—I am in receipt of your favor of the 22d, and hasten to reply. I do not desire to offend you, otherwise I would not have written you as I did; and still feeling that you may not understand my position as appertains to the manufacture of splints, I will repeat: I purchased Ahl's patents, and, together with my own much appreciated improvements, am manufacturing a superior article of splints for surgeons' use, and in order that physicians may not be deceived, I positively refuse to sell them to druggists or instrument men, but conduct their sale entirely through agents of my own, one of whom called at your place and exhibited to you my improved splints. He waited a whole afternoon for you to decide; you did not buy, but promised ere long to send in your order. Now according to your own letter you bought a set of splints from Sharp & Smith, of Chicago. I never sold Sharp & Smith a set of my splints. I know that they did have some of Ahl's old spurious black stuff, made for the U. S. government and rejected, or the like. You having seen my improved splints and having bought a set of Ahl's old splints, know that what I say is correct.

I am doing business on my own basis, not having bought the business or contracts of Dr. Ahl. I do not propose to hold myself responsible for his shortcomings. You bought a set of that worthless old plunder, and they will not duplicate it for you; I therefore cannot see your right to threaten me with publication, etc. If you buy a set of surgeon's splints from me you can have a duplicate for one dollar at any time. In conclusion, all I have to say is, if you propose to carry out your threat, do so, but be sure you relate the whole transaction. Yours, etc.,

(Signed,) W. H. JOHNSTONE.

"A Manifest Imposition"—Material for Splints.

Under the above caption Dr. Finley, of Streater, Ill., complains of the manner of doing business by the company now manufacturing Ahl's splints. In the early part of this month I learned the same thing of Mr. Wm. Autenrieth (instrument maker) of Cincinnati, O., who had at that time several parts of sets which he was selling out by the piece. The ground of complaint which the Doctor makes is just; but I write this to call attention of surgeons to the fact that every dry goods store can furnish a material out of which they can readily make a splint which will answer every purpose of the Ahl splint. I refer to the *pasteboard* around which is wrapped imported cloth goods (broadcloth). It is much thicker, more pliable than ordinary pasteboard, and when wet is easily moulded to the part. Any surgeon who will try this pasteboard will never buy an Ahl splint at any price. This substance was first brought to the notice of the members of the Dearborn County (Indiana) Medical Society, by Dr. George Sutton, of Aurora, Ind., about two years ago.

WM. FREEMAN, M. D.

HARTFORD, Ind., Dec. 30, 1879.

ANSWERS TO QUERIES.

J. W., M. D.—The specimen sent us belongs to the natural order Filices or ferns. As there are about 3,000 species in this family, and their classification is based chiefly upon the fructification, it will be necessary for us to have a specimen in fruit in order to give the name of this species. The ferns as a family possess many points of interest, and several of them have obtained quite a reputation in medicine, notably the male fern (aspidium filix mas, Swartz), the rhizome of which has been employed as a vermifuge from very remote times. The rhizome of the common brake (pteris aquilina, L.), has been reported to possess similar properties, but of this there is no sufficient evidence. The rhizome of a closely allied species, the common maiden-hair (adiantum pedatum, L.), is somewhat astringent and mucilaginous, and has been employed as a remedy in catarrh. The rhizomes of still other species have been popularly employed in the form of a poultice as a remedy for sprains and bruises, and of others for their diuretic and febrifuge properties. It would seem that the ferns well deserve a more careful study with reference to their medicinal value. The rhizome, or, in popular language, the root, contains, in most cases at least, the virtues of the plant, and should be collected in autumn, winter or early spring while the tops are dead.

Dr. D. J. Parsons, of Brownsville, Mo., asks for information regarding the dose of nitrate of ammonia. We have had no experience in the use of this salt as an internal remedy. We would ask for a report, based on its use, from any of our readers who may have submitted it to a trial.

The Therapeutic Gazette

WM. BRODIE, M. D., Editor.
64 Lafayette Avenue.

DETROIT, MICH., FEBRUARY 15, 1880.

GEO. S. DAVIS, Medical Publisher, Box 641.

SUBSCRIPTION PRICE, - - ONE DOLLAR.

PRICE OF BACK NUMBERS:

Single Copies, each ..... $ .10
(Vol. II, No. 1, is now out of print.)

BOUND VOLUMES.

Vols. I and II (quarterly) paper cover, each..... .40
" " " *board* " " ..... .75
Vol. III (monthly), paper cover, each..... 1.00
" " *cloth*, " " 1.50

Picrotoxine and Pilocarpine in Night-Sweats.

DR. Murrell, of the Royal Hospital of Diseases of the Chest, London, has recently published in the Practitioner a series of valuable and interesting articles on the night-sweating of phthisis. In these articles he speaks in the highest terms of jaborandi and picrotoxine as anti-diaphoretics. We published in our last an abstract of his report on the use of picrotoxine. We are informed by Dr. Murrell that he sometimes employs an aqueous solution, of a grain to the half ounce, of which he gives four drops in water three or four times a day, the last dose being taken at bed-time; his preference, however, is for pills each containing one-sixtieth of a grain of the drug.

Pilocarpine, the alkaloid of jaborandi, was given in the form of pill made up with sugar of milk, and in one-twentieth grain doses three or four times a day; equivalent to about eight drops of the fluid extract of jaborandi. The effect of this agent was scarcely less marked than that following the administration of picrotoxine.

These agents, it is well known, when given in full doses are direct excitors of diaphoresis, and their employment in smaller doses to restrain sweating would seem, as we intimated in making the abstract referred to, to furnish an argument for our friends the homœopaths. It by no means necessarily follows, however, that this apparently dual action is in accordance with the so-called law of similars. A variety of agents may be given to produce diaphoresis, and each accomplish the result in a different way. A large dose of tartar emetic, or of veratrum viride, will accomplish it by greatly depressing vital action; refrigerants by lowering the temperature allow, rather than cause, sweating. Jaborandi has evidently a special determination for the sweat and salivary glands. The physiological action of the drug has not yet been fully determined, but reasoning from the analogies furnished by other drugs it is not unreasonable to suppose that, while in small doses it is a tonic to the sudoriferous glands, it may in large doses cause that depression which incapacitates them from the proper discharge of their functions. Quinine in small doses is a tonic, and is contra-indicated in hyperpyrexia, but in large doses it is a depressant, and is one of the most prompt anti-pyretics at our disposal.

But we are not so much interested in the means as in the end, and could even admit that these agents act according to similia similibus. This is one of the benefits of a broad eclecticism.

"No pent-up Utica contracts our powers,
The whole boundless universe is ours."

We may state in this connection that picrotoxine is the active principle of cocculus Indicus, and is coming largely into use in England in the treatment of certain forms of dyspepsia and for leucorrhœa, dysmenorrhœa and other uterine complaints. It is also used as an ointment in the treatment of parasitic diseases.

Dr. Murrell has also found jaborandi, in doses of ten to fifteen drops of the fluid extract, to be useful in checking the flushings and perspirations from which many women suffer at or about the turn of life. He recommends it also as an expectorant, and has been struck with the frequency with which patients said it "did the cough good," "brought up the phlegm," and "eased the breathing." He has used jaborandi with success in chronic bronchitis and winter cough, giving a full dose—a drachm of the fluid extract—at bed-time, and small doses—ten drops—three or four times a day for a week or more.

We hope that some of our readers have been sufficiently interested in the report of Dr. Murrell's experiments to induce a repetition of them. In such cases we trust they will favor us with the result of their experience.

Medical Ethics.

IT is gratifying to notice that the medical profession is beginning to discuss, with a view to its betterment, the Code which the American Medical Association adopted, some thirty-three years ago, as the rule to which the physicians of this country should conform in their dealings one with another, and with their patrons. This Code is an instrument of remarkable vitality, and in spite of the mutations of all those years and the changes which have necessarily occurred in the condition of the people and the profession, and their relations one to another, it stands as unaltered and unalterable as the laws of the Medes and Persians of old. The evils of the instrument, and the abuses and injustice which it tolerates and even fosters, have time and again been pointed out, but as a rule the protestants have been from among the younger and less influential men, who have felt the evils but have been powerless to redress them. The Code is an admirable guide for the conduct of him who has surmounted the difficulties of the early years of practice. To such a one the yoke is not only easy and the burden light, but it serves as a protection to the position which he has achieved. To the neophyte, however, the case is different, and it is not unusual to find men who have renounced the Code as a cumbrous and unjust thing

during the early years of their practice, and who, after distancing their competitors, often because of this renouncement, have professed great contrition, and, returning to their allegiance, have become very Pharisee, among Pharisees.

The Code has served the purpose of a bond between those who subscribe to it, and as between those who stand on a common footing it works no injury, but as between those who have but started in the race and those who have reached the goal it is capable of working flagrant wrong to the former, as it also heavily handicaps the young man who lives up to it in his striving with him of equal years who is not fettered by it. The young "ethical" practitioner is frequently obliged to stand silently by, without daring even to enter a caveat, while he sees his older and wealthier brother twisting and bending the honored Code as a man would play with a hickory withe.

Why the practice of medicine should not be governed by the rules which govern honorable men in other professions is somewhat difficult to understand. The Golden Rule is broad enough for gentlemen in any sphere of life, and the one who is not instinctively governed by it can not be kept straight by any Code. The Medical Record's "Practitioner, of Pine Ridge, on the Hudson," was a pink of propriety in matters codical, but a more dishonest or unprofessional physician or despicable man it would be difficult to find.

The Massachusetts Medical Society is apparently organizing an opposition to the Code of the American Medical Association, and its Councilors are engaged in drawing up rules for its own government. We should prefer, in cutting loose from the government of the Code of the National Association, to submit to no one man's, or set of men's, formulizing, but to take a stand for that broader and unwritten code which has always kept honorable the dealings of gentlemen one with another. It will be difficult to formulate a code which the wealthy and influential practitioner may not be able to violate with impunity, but there is an unwritten code which no man whose friendship, professional or personal, is worth the having, will ever infringe or distort. In our experience of over a quarter of a century under the Code of the American Medical Association we have seen the instrument suffer violence many a time and oft, but in no instance has a guilty member of a society been brought to trial in which he was not either acquitted or, being convicted, did not become a martyr and make out of his martyrdom capital in the community which paid him large dividends.

The Code is not necessary to the honorable physician, and it serves as a cloak of respectability to many who, without it to cover them, would stand out in their native repulsiveness.

Medical Education.

AT the late meeting of the overseers of Harvard University the President and Treasurer made their annual report, in which there are some interesting statements, from their bearing on the subject of the "higher standard," to the importance of which the profession is becoming awake. We quote from the Boston Medical and Surgical Journal, of 22d ult.:

> In regard to the medical school we observe that its prosperity continues and increases. In 1878–9 the number of its students increased ten per cent., and the excess of receipts over expenditures was $9,540.07, although each of the clinical instructors received an honorarium, which was a new charge upon the school. The number of students who possess literary or scientific degrees has doubled in ten years, and now amount to 48 per cent. of the whole number!

It is worth something to be a citizen of a commonwealth whose educational institutions can present such a report, and how we Michiganders would crow if the Medical Department of our University could make such a showing! And why can it not? True we are nearly a thousand miles nearer the setting sun than the Bay State, but our educational facilities have not suffered in consequence, and we have yet to learn that mental calibre diminishes as distance from the "hub" increases. Michigan stands high among her sister states in point of educational advantages; and in view of these advantages it is to her discredit that any institution within her borders should be singled out as an illustration of anything that is weak or pernicious in an educational system. The Detroit Free Press, that wide-awake secular paper, in the course of an article on this subject, says.

> Sooner or later some Medical College in the country will rest its claims to patronage, not on the number but on the character of its graduates; and in that day that College will stand first in the land. It is for this position that the Medical Department (of the University of Michigan) should strive rather than for the cheap fame of having more names on its roll than any other institution. It lowers its own dignity and that of the State when it seeks by reducing the requisites for admission to compete with other colleges.

It is a principle in architecture that the loftier the superstructure the stronger must be the foundation, and a medical college may lengthen its period of study and broaden its curriculum, but if it permits, and even cherishes, defects at the very beginning, attempting the paradox of building an advanced scientific education on the foundation of an "elementary English education," it must not only fail, but must bring down on it the criticism and condemnation of progressive men.

The experiment at Harvard, of a higher standard, having been so signally successful, both financially and otherwise, the Faculty of the Medical Department of the University of Michigan can have no excuse, unless it be a consciousness of their own inherent weakness and incapacity, which we would scarcely admit, for not stepping up and taking their stand on the higher plane. The medical faculty of the University of Michigan is composed of gentlemen whose ability will compare favorably with that of any corps of professors in the country. Backed as they are by a powerful State, which would look with pride on the institution over which they preside, they are not dependent as private institutions are on the support coming from student's fees, and it behooves them not to allow themselves to be outstripped in their effort to raise the profession of this country to the position it should occupy.

Alkalies in Anæmia.

THE therapeutics of anæmia are frequently unsatisfactory, and the causes are by no means few in which the ferruginous tonics are plied assiduously and persistently without beneficial results.

Ordinarily iron, in one of the hundred odd preparations which are at the disposal of the practitioner, in connection with a generous diet, will succeed in increasing the number of red blood corpuscles and in restoring color to the waxy countenance and the colorless lips. Indeed, the physician is, as a rule, justifiable in predicting relief. Occasionally, however, cases are met which indefinitely defy all efforts at their relief, and both physician and patient become disheartened and discouraged. These are those in which it is impossible to trace the trouble to any particular cause. A paper by W. Nicholson, M. D., of Greenwich, England, published in the Practitioner for January, throws considerable light on these obscure cases.

Dr. Nicholson traces the cause of anæmia in many cases to the liver; he in fact regards hepatic anæmia as the commonest form, and intimates that if the liver be interrogated it will be found to be the *fons et origo malis* in the majority of otherwise inexplicable cases. In anæmia, as in all other diseases, it is not sufficient to prescribe for symptoms, neither to confine oneself to a particular medicine, simply because it has proven of service in a certain proportion of cases. Cullen, Sydenham and Gregory were deceived in their therapeutics, and is it too much to suspect the possibility of error in more modern days? Dr. Nicholson in his prefatory remarks very aptly shows the inconsistency of those who, failing in one line of treatment, or with one remedy or set of remedies, still tenaciously cling to it, refusing to adopt a new line or a new remedy. There being no infallible guide to therapeutics, experience must determine the use of the agents.

In discussing the alkalies reference is made only to potash and soda, and the point made that they are not so like in their action on the system as is usually supposed. Soda, according to the text books, acts more on the liver, and potash on the kidneys. Potash acts on the glands, but soda has no corresponding action; or, expressed differently, soda is but a local antacid, whereas potash is, in addition, a general remedy. Whereas both are depressing when continued any length of time soda is least so.

Dr. Nicholson combats the usually received views as to the different action of soda and potash. Potash increases the volume of urine to such a small amount that few practitioners prescribe it for that purpose. It has, however, a marked effect in clearing the urine of pigments, and this action Dr. Nicholson shows is owing rather to its action on the liver than on the kidneys.

The doctrine that alkalies are depressants, is also denied, and the fallacy of the reasons for the assumption that they are such, pointed out.

The indications for alkalies in anæmia are not necessarily those which are commonly supposed to demand their use, viz., the furred tongue, loss of appetite, acid eructations, flatulence, heartburn, etc., pointing to trouble in the digestive tract. There are conditions in which alkalies are beneficial and curative where none of these symptoms are present.

"Perhaps the best known indication that is not local are the abnormal urinary sediments whose formation is prevented by alkalies. I say this is a well-known indication for an alkali although there may be no symptoms of anything wrong with the digestive tract; it is the same often with gouty pains; so, too, with many cases of eczema and other skin eruptions. In all these cases we may conclude that there is something wrong in the digestive tract, but it may not be shown by any local symptoms; this is caused by a disorder of the liver, which is is not directly connected with digestion so much as it is with the blood.

Another indication for the alkalies, lies in the fact that in many cases we have no antidote or agent for a direct attack on the disease, and so we must rest satisfied simply by assisting nature, leaving her to effect a cure. With this view may we give the alkalies, to improve the tone of the digestive system, increasing the appetite, aiding the liver to work, promoting the flow of bile, and clearing the blood and urine from lithates, or other sediments and impurities. Alkalies are not classed with tonics, but I regard them as tonic. By tone I mean a state of health, and if we can improve the unhealthy state of the gastro-enteric tract by alkalies, and assist towards a return of appetite and so on to a state of general health, then most assuredly the alkalies are tonic, and I think there is little doubt that the alkalies, more than any other remedy, can restore the digestive tract to a state of health, while iron, instead of giving tone is apt to disorder the digestive tract."

These views are important, and are worthy of being put to the test.

Notes and Comments.

Mercury Weed.

We would thank any of our readers who may have used this drug to favor us with the dose in which they have employed it. There have been inquiries regarding this drug, and we are not sufficiently familiar with it to fix its dose.

California Laurel.

Dr. L. Mann, of Mendocino, California, writes that he has obtained an oil of California laurel by distillation from the leaves, and has found it to be a powerful remedy applied externally. In a case of rheumatism, it not only promptly relieved the pain, but also cured the affection.

Vaginal Hysterotomy.

We learn that our former townsman, Prof. E. W. Jenks, now of the Chicago Medical College, has successfully performed the difficult and rare operation of vaginal hysterotomy, removing the entire uterus through the vagina. The operation was performed on the 8th ult., and the patient has been discharged completely recovered. The operation was resorted to on account of malignant disease of the uterus, and was the only procedure which could shed a ray of hope on a hopeless disease. We congratulate our friend Jenks on this success, which, however, can only serve to establish more securely, if possible, the position which merit has long since secured for him among the gynæcologists of this country.

Book Reviews and Notices.

Half Yearly Compendium of Medical Science. Edited by D. G. Brinton, M. D. Part XXV, January, 1880; 3d Series, No. 1. Terms of subscription per annum, in advance, $2.50; 115 South Seventh street, Philadelphia.

As its name implies; the Compendium gives a synopsis of the American and foreign literature of Medicine, Surgery and the collateral sciences every six months. To the physcian and surgeon it is a work of valuable reference and at moderate cost.

Galveston Medical Journal, Galveston, Texas. Dr. Greenville Dowell, Editor and Publisher, assisted by Drs. T. J. Heard and J. F. Y. Paine. Monthly. Terms $3.00 per annum; Vol. I, No. 1.

There have been medical journals in Texas before, but from various causes they have not had a long life. We extend our best wishes to this new enterprise, and if anybody in Texas can carry it through, Greenville Dowell, M, D., is the man. Pay or no Journal is his motto.

Leonard's Illustrated Medical Journal. Published Quarterly. Subscription price 50 cents per annum; pp. 24, Vol. I, No. 1.

We think the publisher has made a mistake; he should either charge more for his journal—leave out the illustrations—or have more perfect ones. We have known J. Marion Sims for many years, and had not the text told whom the portrait represented we would not have recognized him. We have no desire to discourage, and laying aside the pictures, we have a readable and interesting journal, and one which, we trust, will be remunerative to our brother Leonard.

Photographic Illustrations of Skin Diseases. By George Henry Fox, A. M., M. D., Parts 3 and 4. E. B. Treat, No. 805 Broadway, New York City, Publisher. Price in parts $2.00. From the Publisher.

We have expressed our opinions heretofore upon this work, and thus far see no reason to withdraw them. Part 3 treats of Fibroma Penduluum; Varicella; Zoster Pectoralis; Zoster Lumbalis; Eczema Universalis. Part 4 of Leucoderma; Chronophytosis; Favus Capitis; Favus Corporis; Eczema Cruris. We are surprised that the author has been able to make his illustrations so natural; he has succeeded to a marked extent. A terse description is given in the text which precedes each plate, and also the mode of treatment, with prescriptions. The whole will be completed in 48 plates. Eight more parts are yet to appear. The price of the work is very moderate.

Annals of the Anatomical and Surgical Societies. Monthly; Edited by Charles Jewett, M. D., and a corps of assistants. New York: G. P. Putnam's Sons, 182 Fifth Avenue; Vol. II, No. 1; annual subscription, $2.00; pp. 40.

The Annals records the scientific work of the Brooklyn, N. Y. Anatomical and Surgical Society, which is devoted to the promotion of the study of anatomy, surgery and pathology. The present number commences with a lecture on Cerebral Anatomy, by John C. Dalton, with seven illustrations; Double Monsters, by Lewis S. Pilcher, M. D., with ten illustrations; Vesalius, (two illustrations), by Geo. J. Fustin, M. D.; Editorials, Clinics, etc. It is printed on excellent white paper and clear type. We know of no competitor, and cordially recommend it. Address, "Editor of the Annals of the Anatomical and Surgical Society," 28 Madison street, Brooklyn, N. Y. Please exchange, and send first volume, if to be had.

A Manual of the Practice of Surgery. By W. Fairlie Clark, M. A., and M. B., (Oxon.) F. R. C. S., Assistant Surgeon to Charing Cross Hospital. From the last London edition; revised and edited with additions by an American Surgeon. New York: William Wood & Co., 27 Great Jones St. 1879.

This is No. 12 of Wood's Medical Library, and concludes the first year. The volume is purely surgical, and although in some things not quite up to the times, yet it is a valuable book, especially to the beginners in surgery. Part 1st, treats of Surgical Diseases; 2nd, Injuries; 3d, Constitutional Effects of Surgical Diseases and Injuries; 4th, Disease and Injuries of Various Parts, Tissues and Organs; 5th, Operations. The author claims for it only as a Manual of Surgery. It is well illustrated by drawings by the author taken from his own portfolio, others from preparations in the Charing Cross Hospital. The American editor has added (in brackets) the Antiseptic Treatment of Wounds, the Use of the Elastic Bandage, the Application of the Plaster of Paris Jacket, the New Treatment for Morbus Coxarius, etc., etc.; Bigelow's Method of Lithotapaxy, is also given. We think the last volume one of the best. We hope the publishers have not been at a loss, and trust they may see their way to continue the library another year.

The January Number of the Journal of Nervous and Mental Diseases. Edited by J. S. Jewell, M. D., Professor of Nervous and Mental Diseases in the Chicago Medical College; assisted by a corps of able associate editors, is on our table. It is published quarterly. Chicago: 70 Monroe street; branch office, G. P. Putnam's Sons, 182 Fifth avenue, New York; $5.00 per annum.

To any one, whether physician or layman, we cordially recommend this journal. Every person of intelligence is interested (or ought to be), in affections of the human mind. To speak the truth, we are all yet in our infancy as to what constitutes insanity. We know the pathology of pneumonia and many other diseases, but we know but little of the pathological condition of the brain that generates the many varieties of its aberations as regards its mental condition. It has become almost a question, can insanity be cured? That some are cured who are called insane, we believe, but are any cured who are really insane? We have for years been interested in this problem, but like most practitioners, we apprehend, are still in need of of light. Hence, we are interested in Dr. Jewell's journal, and hope that some genius may arise to illumine this great field of darkness, for death of the body from our standpoint, is far more preferable to living mental death. Our field of professional labor does not lie in this direction, but the question is so blended with our professional pursuits that we need all the light that can be thrown on this great hidden mystery.

Reynolds' System of Medicine. A System of Medicine edited by J. Russel Reynolds, M. D., F. R. S., Professor of the Principles and Practice of Medicine in the University College, London; with Notes and Additions by Henry Hartshorne, M. D., late Professor of Hygiene in the University of Pennsylvania. To be completed in three large and handsome royal octavo volumes, containing in all about 3,000 clearly printed double column pages, with numerous illustrations. Subscription price in cloth, $15.00; in leather, raised bands, $18.00. Price per volume in cloth, $5.00; in leather, $6.00. Philadelphia: Henry C. Lea, 1879.

Volume 1, containing General Diseases and Diseases of the Nervous System. Vol. 2, containing Diseases of the Respiratory and Circulatory Systems are now issued, and Vol. 3, on Diseases of the Digest-

ive and Glandular Systems, of the Urinary Organs, of the Female Reproductive System, and of the Cutaneous System, will follow shortly (and, we may add, certainly). This great work, the production of the leading minds in the practice of medicine in England, Scotland and Ireland, bears the same relation to medicine as Holmes' great work on surgery does to surgery. Prof. Gross says of it: "The present production is an elaborate and exhaustive one, reflecting the latest learning, science, and experience of a large number of the most matured and cultured minds of England, Ireland and Scotland. It is a work of rare merit, in which every article is fully brought up to the existing state of the science of which it treats." Prof. Stillé says: "Its distinctive merit is that every article is a monograph prepared by an expert, and for the most part in a very superior manner." Prof. Da Costa says: "I know of no work in the English language more thorough and complete." Prof. Bartholow says: "It represents the most advanced and scientific phase of medicine."

Some of the diseases which are of less importance in England than in this country, have been elaborated, and the treatment suitable to the American climate has been given. This labor has been attended to by Henry Hartshorne, M. D., late professor of Hygiene in the University of Pennsylvania, than whom no one is better qualified for the duty. We have carefully examined the two volumes already published, and must say we are surprised at the vast amount of information contained therein, and also at the practical and readable manner in which it is presented. The work is of the highest order, and we cordially recommend it to the medical profession, knowing they will not be disappointed.

The work is sold only by subscription. Macauley Bros., 183 Woodward avenue, Detroit, Mich., are the agents for Michigan, and they intend to call upon every physician in the State. It is a rare opportunity to procure a most valuable work on all that pertains to practical medicine.

Pamphlets Received.

Valedictory Address to the Graduating Class of the Medical Department of the University of California. By W. F. McNutt, M. D., L. R. C. P. Ed., &c., &c. Professor of the Principles and Practice of Medicine, U. of C. From the author.

Annual Report of the Central Kentucky Lunatic Asylum. (Anchorage, Ky.), for the year ending November 1, 1879. Compliments of R. H. Gale, Medical Superintendent.

Therapeutic Progress.

Treatment of Hydrophobia by Curara.—A boy, 12 years of age, was bitten by a mad dog. After a long incubation, hydrophobia was developed. After using chloroform, injections of Curara were used in seven doses of seven grains as the total amount in five hours and a half. With the first dose muscular motion ceased, and with it also the dread of water, and all spasmodic twitchings; and, finally, complete calmness for forty-eight hours. When symptoms of the disease again returned, Curara, in one-third of the dose, was continued until health was re-established. There was some local inflammation around the points injected.—*Giornale de Venice.*

Treatment of Post-Nasal Catarrh.—In the London Medical Record, which frequently contains useful hints for the general practitioner, I saw lately a formula for the treatment of post-nasal catarrh. It was, I believe, originally suggested by Dr. Duffin. It consists of oxide of bismuth, powdered gum acacia, and a small quantity of muriate of morphia. It should be well mixed, and then, if used as a snuff in severe coryza or post-nasal catarrh, it acts in a most charming manner. Cases of great severity and long duration have yielded to its influence after three or four days.—*Joseph Rogers, M. D., Dean Street, Soho, in British Medical Journal.*

How to Cure Fits of Sneezing.—In the issue of the British Medical Journal dated December 27th, 1879, the above heading having attracted my attention, I was very much interested to find that the course of procedure recommended agrees to a certain extent—the principle being the same—with the practice I have adopted for years. Since my schoolboy days, I have known that, if the nostril of the affected side be stopped early enough, as by pressure with the finger on the alni nasi, there will be no sneeze. During more recent years, when I have been suffering from irritation of my Schneiderian membrane so as to annoy me, I have selected out and placed a good "chamomile flower" in each nostril. I find that it not only acts as a respirator, but the flower gives off a very grateful aroma, which I consider beneficial from its soothing influence. These flowers are inexpensive, and can be obtained of all sizes. They will be found, I believe, very useful if placed lightly within the nostrils. Although I have practised this little idea for some time, I did not consider it worthy of recording until I observed the communication of Mr. S. M. Bradley in this journal. I may add that, during the past autumn, I was very much annoyed with continued irritation of my Schneiderian membrane, to which the foregoing only gave temporary relief. After trying many things, I bethought myself of trying extract of belladonna; the small dose of half a grain of this drug produces its toxic effects on me, drying up the secretions of my fæces, etc. Although it is now more that two months since I took my dose, I continue free from anything unusual in this way. I may say that the irritation complained of did not amount to sneezing, but to a raw sensation on inhalation, which I found very annoying. I was, therefore, very much pleased when I found that the irritation produced by my dose terminated in complete resolution. Should these hints be of any benefit to mankind, I will be more than compensated.—*John Martin, L. K. Q. C. P. I., L. R. C. S. I., Senior Medical Officer Belfast Infirmary, in British Medical Journal.*

Therapeutic Effects of Lightning upon Cancer.—As I am not aware that the records of the healing art furnish any case of cancer having yielded to the influence of lightning, I venture to draw the attention of the numerous readers of The Lancet to the following remarkable case, which may awaken due interest in the curative value of electricity in diseases of a malignant type. Many years ago I heard the late Dr. Golding Bird express an opinion to the effect that electrical sparks drawn from a cancerous structure until an eruption is produced was the only reliable means of cure which he could endorse. In confirmation of the theory of the cele-

brated electrician, I beg to submit an extraordinary instance of the therapeutic freaks of atmospheric electricity in the cure of cancer. The case loses none of its interest on the plea of antiquity.

About thirty years ago I attended Reuben S——, a farm laborer, residing at Langtoft, on the Yorkshire Wolds, who suffered from cancer of the inferior lip and part of the chin for about a year, and who had agreed to an operation for their removal. In the meantime he undertook to assist a poor farmer for a day in ploughing his land. During this occupation he was struck down by lightning, and carried home in a state of insensibility. Both of his horses were killed, and the wooden beam of the plough was split and reduced to considerable fragments. Soon after the occurrence I visited, and found the ploughman in a state of great prostration, and emitting a strong odor of ozone, indicating electrical condensation of the adherent oxygen. As soon as reaction took place I bled him from the arm, which act constituted the whole of the treatment. What seems to be the most astonishing feature in the case is the healing process which was set up in the lip and chin soon after the accident. The cancer gradually lessened, and in a few weeks every trace of the diseased structure disappeared, and for ten years he enjoyed complete freedom from his former suffering and signs of the disease. In proof of the specific and hereditary character of the disorder, I may state that the patient's granddaughter, Mrs, P——, of Driffield, lately became the subject of a cancerous tumor over the larynx, which growth, assisted by Dr. Eames, I removed successfully a few weeks ago, and under the persistent use of arsenical treatment the cure seems to be satisfactory. In S——'s case the electrical fluid seemed to form and pass through two small holes in the head-band of his trousers, and to make its exit by corresponding apertures. After this remarkable exemption from all cancerous development for so long a period, the disease reappeared, and, after a year of intense suffering, proved fatal; still leaving the inference unaffected, that the imponderable element secured for the patient an extension of life, and ten years' relief from the distressing consequences of carcinoma, which circumstance establishes my faith in the therapeutic power of electricity in scirrhous indurations.

From the foregoing representation, it is evident that frictional electricity may in good hands become one of the most powerful therapeutic agents in the dispersion of cancerous formations. When cellular hypertrophy takes place in localities favorable to the development of epithelial disease, frictional electricity might be employed for the purpose of destroying the morbid cells, whether in their incipient or advanced stages of progression. The authorities of the London Cancer Hospital will be unfaithful to their honorable trust should they decline to test to the fullest extent the curative effects of frictional electricity in some of the most hopeless variety of diseases to which humanity is exposed.

I shall not venture upon any theory of the specific action of electricity on morbid depositions, but consign the whole question to the abler readers of your incomparable journal.—*A. Allison, M. D., in London (Eng.) Lancet.*

MATERIA MEDICA.—Within the last year or two, the contributions to the list of materia medica have been large. Among these novelties, a few possess valuable therapeutic properties; while the greater portion are mere novelties or old remedies revived, which will be classed as worthless as soon as they cease to pay the unscrupulous advertiser who recommends them to the over-credulous of our profession and to the public, by the most exaggerated statements of their wonderful virtues. To burden this paper with an enumeration of them, in my judgment, would be foreign to my subject. True advance is shown only after the agents suggested have been duly investigated by trustworthy and intelligent seekers after truth, and have been found efficacious in disease, Of such, I will briefly allude to

Araroba, or Goa Powder—a Brazilian product, which came to the attention of the medical world through its efficacy in the Portuguese colonies, in Africa and Asia—places noted for the inveterate character of many loathsome skin diseases—as a remedy particularly for psoriasis. It has been examined chemically by Professor Attfield. He discovered its active principle to be crysophanic acid, The crude powder, as well as its active constituent, are now well endorsed as valuable medicinal agents, and the range of its usefulness much extended.

It is interesting to observe that our common yellow dock—"rumex"—that has enjoyed a certain amount of reputation among domestic remedies as a remedy for cutaneous diseases, such as ringworm, itch, etc., is found to be rich in this same crysophanic acid. A hint is here given to our country practitioners to utilize this indigenous plant in their practice.

Thymol—obtained from oil of thyme—has become a popular antiseptic and disinfectant. Perhaps no greater praise has been awarded to it than that arising from the fact that it is one of the few new remedies that meets with approbation in the pages of the National Dispensatory, last edition. As a remedy, it has the advantages over carbolic acid in its not being irritating or corrosive to the tissues of the body, and in possessing an agreeable odor; and it is said to be not inferior to it in its disinfecting property. These advantages entitle it to a place in our materia medica. An ointment of it (30 grains to the ounce), is recommended as a substitute for the obnoxious tar ointment, in all cases where the latter might be efficacious.

Ethylates of Sodium and Potassium, recommended by Dr. Benj. Richardson, of London, appear to be valuable caustic agents. In the year 1870, Dr. Richardson, at a meeting of the Medical Society of London, read a paper on this subject; and again in the London Lancet (American edition) July, 1879, he calls the subject to the notice of the wider circle of medical practitioners.

Sodium Alcohol, or Sodium Ethylate, is prepared by simply treating absolute alcohol with metallic sodium. As thus obtained, it is in the form of a thick, white product. It is a most convenient caustic. Laid on dry parts of the body, it is comparatively inert; but so soon as the parts to which it may be applied give up a little moisture, its caustic action can be observed. Its action may be developed so gradually as to be hardly perceptible, or increased by the intelligent use of it, to the most potent caustic effect.

The *sodium salt* is recommended more particularly for general use from its being a milder caustic than the potassium salt. For practical use, it is recommended for destroying morbid growths that are not favorable for excision by the knife. It may be used either externally or by injection into the morbid tissues. When the pain is felt to too great a degree, or when its caustic action is too pronounced, it may be quickly checked by a few drops of chloroform, which decompose it into an inert chloride salt and an ether.

Dr. Richardson has used these ethylates repeatedly in his practice, with much success, and recommends them chiefly in three forms of disease, viz.: cutaneous nævus, lupus, and malignant ulcer. The remarks of Dr. Lauder Brunton before the Medical Society of London, and published in the Lancet, January, 1879, are very interesting in the report of several cases of nævi, treated most satisfactorily with this remedy.

(The following notes on the two new *Myotics*, Eserine and Pilocarpine, and on the new *Mydriatic*, Dubosine, are kindly contributed by Dr. Joseph A. White, of Richmond:)

Eserine is one of the alkaloids of the Calabar bean (physostigma venenosum), and was first introduced into ophthalmic practice by Prof. Lagueur, of Strassbourg, in 1875. It is most commonly used in the form of a neutral salt—the *Sulphate of Eserine*. A one per cent. solution (about four grains, to the ounce of water), if dropped into the eye, produces contraction of the pupil, spasm of the ciliary muscle, shortening of the range of vision, and a decrease of the radius of corneal curvature. It is therefore, a *Myotic*, and its local effects are antagonistic to atropine and duboisine. Although it sometimes irritates the conjunctiva, I do not think it ever produces any constitutional symptoms.

As a local application it has been used in corneal ulceration, more especially in the peripheral forms, with tendency to perforation; in abscess of the cornea; in corneal suppuration following cataract extraction; in keratocomus; in commencing sympathetic irritation; in paresis of the accomodation, and in some forms of glaucoma, with very favorable results.

In keratitis, it has not developed any specific action and in glaucoma has disappointed the expectations that were at first formed of it as a curative means in this affection. In the acute form, it has, in some few cases, seemed to arrest the disease; in the sub-acute form, it is a palliative measure that may be resorted to as preparatory to iridectomy; but in neither form can it take the place of this operation. In chronic glaucoma, it may be positively dangerous, because of a tendency it has shown of bringing on acute attacks.

Pilocarpine is the active principle of jaborandi (policarpus pennatifolius), which was discovered by Mr. Hardy, and introduced into ophthalmic practic. Its two salts—the *muriate* and *nitrate*—are both used, but more especially the former. Its local application causes contraction of the pupil, and increased secretion of the lachrymal gland, and, by absorption, may produce some of its constitutional effects. These are profuse perspiration, ptyalism and slight nausea, and in larger doses, vomiting, pain in abdomen and genitals, with general prostration.

As, when administered internally or hypodermically in such doses as do not produce the violent physiological effects, it improves the peripheral circulation, decreases the temperature of the body, and causes vascular depletion of the eye, it is a valuable remedy in treating irido-choroiditis, sympathetic irido-cyclitis, in choroiditis exudation, in opacities of the vitreous, in retinal detachment, in glaucoma and in commencing atrophy of the optic nerves. In fact, some claim that it is almost a specific against commencing atrophy.

Locally, it is used in rheumatic and serous iritis, and in specific and rheumatic keratitis. As a myotic, it is inferior to eserine, as the latter produces no unpleasant effects beyond occasionally some irritation of the conjunctiva. For local application, a one per cent. solution (about grs. 4 to the ounce of water) of the muriate of pilocarpine is most commonly employed. Hypodermically, I have administered it in doses varying from gr. 1-6 to 1-2 daily, according to the susceptibility of the individual to its influence, always regulating its administration so as to stop short of nausea and vomiting, as the perspiration, ptyalism and reduction of temperature are sufficient manifestations of its physiological action. In some patients, I have seen it followed by profuse perspiration without ptyalism, and *vice versa*.

Duboisine, the latest remedy in ophthalmic therapeutics, is the active principle of the duboisia myoporoïdes, an Australian plant of the family of scrofularicées. The alkaloid was first obtained from the plant by Gerhard, of London.

Its action is very similar to atropine, but more powerful. It therefore belongs to the class of *mydriatics*, and is antagonistic to eserine and pilocarpine.

It is used in the same class of cases as atropine, but is superior to the latter, inasmuch as it dilates the pupil, and paralyzes the accommodation more promptly; its effects are less lasting, and it does not irritate the conjunctiva. From this latter property, it is indicated in cases which show an idiosyncrasy against atropine.

It also has the power of dilating the retinal veins; and further investigation of this property may show it to be a very valuable remedy in some affections of the fundus occuli. In rare instances (as reported by Dr. Seeley, of Cincinnati), when a strong solution has been used too continuously, it has produced vertigo and drowsiness.

The strength of the solution for local use is from two to four grains to the ounce.

All these remedies are very high-priced, and have not yet come into common use; and although many experiments have been made as to the applicability, their exact value as therapeutic agents has not yet been determined.—*E. T. Robinson, M. D., in Virginia Med. Monthly.*

New Remedies.

PHYSIOLOGICAL AND THERAPEUTIC ACTION OF COTO BARK AND ITS CONSTITUENTS.—The conclusion arrived at by Dr. V. Gietl, who prescribed an alcoholic tincture of the bark, is that "We have in the new ('genuine') Coto bark a specific remedy for diarrhœa in its various modifications."

Dr. Burkart has communicated his experience

with regard to the employment of the bark itself and of an alcoholic tincture of it (1 : 9). In doses of 0.5 to 1.0 gramme, the bark caused hiccough, nausea, a burning sensation in the stomach, and even vomiting. With a dose of 1 gramme of the bark the burning feeling in the stomach was very considerable, extending from a quarter to half an hour; finally, most of the bark was vomited. The tincture was even more nauseous. When rubbed on the skin it produced hyperæmia, with a burning sensation.

Dr. Burkart also states that paracoto bark, similarly prescribed, has much the same effect as coto bark, excepting that its action on the skin, mucous membrane and ulcerous surfaces is extremely slight, so that to produce an action equal to coto bark, a considerably larger quantity must be used. He has also prescribed an alcoholic tincture of "genuine" coto bark, and his observations are in accord with those of V. Gietl's, but he believes that, on account of its secondary action on the stomach, the bark is not apparently suitable for therapeutic purposes.

For these and other reasons the authors recommend the employment of the active principles of these two barks, cotoïn and paracotoïn, both of which have yielded good results in the hands of Dr. Burkart, who employed cotoïn partly in the form of powder (.05 gramme per dose every two or three hours), partly in aqueous solution (0.1 to 0.5 : 120 with the addition of a taste corrective) in cases of acute and chronic stomachic catarrh. In cases of chronic stomachic catarrh, with relaxation of the coating of the stomach, it was specially efficacious, and in the diarrhœa of phthisis also causing a reduction of the febrile symptoms.

Cotoïn, in all cases, Dr. Burkart further remarks, is passed by the urine in four to six hours after being taken. To detect cotoïn in the urine he used the nitric acid reaction.

Paracotoïn was found to have absolutely no action on the mucous membrane.

Paracotoïn was employed with great success by Dr. Burkart in powder (in doses of 0.1 to 0.2 gramme every two or three hours) in cases of chronic and acute stomachic catarrh, and with success in two cases out of three in cholera nostras.

Professor Bälz (Tokio, Japan), has successfully employed Paracotoïn in Asiatic cholera, and where possible, by subcutaneous injection, in doses of 0.2 gramme.

Oxyleucotin, leucotin, and hydrocotoïn have an analogous action, but in such a very slight degree that very large doses of these bodies are necessary to have the same effect as cotoïn and paracotoïn.

Sarracenia Flava.—This is the most common plant in the savannahs of southeastern North Carolina. The plant is known locally as the "yellow trumpet," the flower as the "biscuit" and "watch." The name "fly-catcher" we have never heard as applied to it, and the name "huntsman's cup" belongs to the purple sarracenia, which has a semi-procumbent leaf, shaped not unlike a gravy boat. The plant with the spots on the hood is a different one entirely. In fact, sarracenia flava has no hood properly so-called, the stem being erect, the wing narrow, and the part of the leaf which is a nodding hood in the sarracenia variolaris, flares obliquely backward and upward.

This plant comes to the front as a remedy in diarrhœa, of extraordinary power, upon the authority of Dr. J. Dabney Palmer, of Monticello, Florida. Of course, such an enthusiastic statement as its being "a certain specific in cases of acute and chronic diarrhœa in the adult" needs to be substantiated. Should it prove as useful as Dr. Palmer thinks, North Carolina can contribute several square miles to the supply of the world without missing them.—*N. C. Medical Journal.*

Carica Papaya, Papaw, as a Digestive.—Our attention is again called to the active principle of carica papapa by an abstract of a paper by Theodore Peckolt in the London Medical Record, of Dec. 15th, 1879. Peckolt's examination of the fruit, seeds and milk of the plant, showed a white amorphous substance, which he calls papaytin. He knew that in Brazil the Indians had used the leaves from time immemorial for rendering meat tender, but it did not occur to him that the active principle papayotin might be a pepsin-like substance until he saw, in the Austrian Society's Journal, notices by Wittnack and Roy which induced him to review his first experimental analyses. He found a solution of the active principle to possess the power of digesting meat.

A most singular mistake is made by Professor Peyre Porcher, of Charleston, in his excellent "Resources of the Southern Fields and Forest" (pp. 41 and 42), by confounding the North American papaw, asiminia triloba, with the South American papaw, Carica Papaya. The two things are about as far apart as two members of the polypetala division can well be.

The former is placed in the anonaceæ, in close relationship with the ranunculaceæ, the latter is now placed in the passifloriceæ.—*Thurber.*

The name, no doubt, by right of priority, belongs to the tropical fruit, the French for which is Papayer, but it is not certain whether the French or the other is the original. Gray, in his "Genera," volume 1, page 68, says: "The popular name papaw was doubtless given the fruit of asiminia triloba from a fancied resemblance in the appearance or taste of the fruit to the papaw of tropical America."

Dr. Porcher's invitation for experiment with the American papaw would doubtless prove disappointing to the experimenter, the two plants having so little relationship to each other.

It will be in order now for one of our enterprising pharmaceutical chemists—say, Parke, Davis & Co.—to see what can be made of the plant with this hint.—*N. C. Medical Journal.*

Bichloride of Ethidene as an Anæsthetic.—The interesting paper lately published by Dr. Jacob on "Ether as an Anæsthetic" induces me to draw attention to some points of interest in connection with bichloride of ethidene, which has lately been used for the purpose of producing anæsthesia. It has at present been so little tried that a long time must necessarily elapse before its relative value can be determined. I have administered this drug in half a dozen cases, and so far I have met with favorable results. Unconsciousness is produced, so far as my experience goes, with very little struggling, and four and three-quarter minutes was the longest time re-

quired. The pulse is slowed, but remains full, and I have not yet met with any symptom of cardiac failure. The breathing was quite quiet and uninterrupted, and there was an absence of all bronchial irritation and frothing at the mouth. Vomiting occurred once in the first five cases, and then was both slight and transient. The sixth case, so far as vomiting is concerned, was not, in my opinion, a fair test. The subject was a child, who had come from the country to have an ophthalmic operation performed, and there was an absence of those precautions which can only be ensured with in-patients of hospitals and intelligent private patients. The popular notion seems to be that if a person has to submit to a surgical procedure severe enough to require anæsthesia, a good meal is necessary to carry him through it. A practical application of this notion is inconvenient. Vomiting did occur in this (my sixth) case, but not with severity. The largest quantity used was an ounce; this was given to a boy, 18 years of age, who had an organic systolic murmur at the apex of the heart, and he was kept unconscious for thirty-five minutes. In all these cases the drug was administered on a piece of lint or a towel. . It was obtained from C. A. F. Kalbaum, of Berlin, by Messrs. Burgoyne, Burbidges & Co. It is a very expensive agent (I believe 32s. a pound), and should be kept in a capped bottle for the purpose of preventing evaporation.—*J. Henry Palmer, in London Lancet.*

CURARA.—J. Moss, in view of the circumstance that curara has been proposed as a remedy for hydrophobia, communicates some interesting information in reference to its history, source, preparation, character, and uses. It is the arrow-poison used by all the South American savages between the Amazon and Orinoco, and according to most authorities it is made by the Macoushi Indians, although the Acaaway tribe is also mentioned. It is known by the synonyms, Ourari, Urari, Wourarari, Wourali, Wouraly. Perhaps the first account of the wouraly poison is given by Watterton in his "Wanderings in South America," who obtained a quantity of the drug from the Macoushi Indians. He does not seem to have made any inquiry respecting the plant yielding the principal ingredient, or to have obtained a specimen of it, but describes the process of its preparation, which is briefly this: Thin scrapings of the wourari vine and of a bitter root are percolated with water in a crude fashion into an earthen pot, and into the percolate the green and glutinous juice of two kinds of bulbous plants is squeezed with the hands; two kinds of ants, the one large and black, the other small and red, are bruised up with the fangs of two kinds of snakes, and a quantity of the strongest Indian pepper, and all is thrown into the pot, which is then placed over a fire, and the contents boiled down to a thick syrup of a deep brown color. If on trial it is found to be satisfactory, the syrup is poured into a calabash, and carefully covered with leaves and deerskin, and set aside in a dry place. Mr. Hancock, who resided for many years in British Guiana, received two accounts from different Indians, which well agree with each other. They call the plant mavacuri, and say it is of the gourd kind, or one of the cucurbitaceæ, of the size of a large orange, round, and having a hard shell or pericarp, which is used at times to contain poison. The poison is made from the bark, which is peeled or scraped off by bruising it well in a mortar, transferring the mass to a funnel or cartocho made of wild plantain leaves, having a little cotton at the bottom to strain it through, and then lixiviate the mass with cold water; the infusion is boiled down to the proper consistence in an earthen pot, nothing further being added, according to either account. Mr. J. Forsyth, however, informed Dr. Hancock that besides the wourari vine, the inner bark or rind of the root of which is used only, and a small branch of which accompanied the information, two other vines, called the wooray bally and courampoey, are used as auxiliaries to strengthen* the former. The wooray bally root undergoes the same process as the wourari, but it is the vine itself of the courampoey that is used; finally, some peppers are added, and the whole well boiled down to a thick syrup. In 1837 Dr. Hancock added to his previous statements, that in the preparation of the poisons by the Macoushis, the slimy barks of the kyheri and quasima are added, to give tenacity to the extract. He also remarks that "the most efficient poison is prepared from the wourari vine alone." It seems, therefore, probable that the *modus opérandi* of the savage varies with the material at his command in the changing seasons of the year. The wourari vine now seems to be generally accepted to belong to the strychnos family, strychnos toxifera being more particularly mentioned. As to the description of the poison, it does not always tally. Waterton describes it as "a thick syrup of a deep brown color." In 1838 he says, "On opening the wax in which it is enclosed, I found it quite soft and ready for use, although it had not been looked at for twenty years." Forsyth says, "The Indians boil the whole mass to a thick syrup." Wormley, Watts and Taylor agree in their description, according to which it is a brownish-black, shining, resinous mass, almost wholly soluble in water, either cold or warm, easily soluble in aqueous alcohol, partly soluble in ether, sparingly soluble in absolute alcohol, bitter to the taste, neutral in reaction; and their description applies to the curara which is at present found in commerce. After reviewing the physiological properties and antidotes, and the views as to the nature of the active principle, "curara," etc., the author proceeds to give the result of his microscopical examination. A minute fragment of curara corresponding to the description above given, was placed in a drop of alcohol on a slide, and well crushed by pressure on the cover. The central mass of curara was seen to be of a rich brown color, and copiously studded with quadrilateral crystals. Outside this were numerous isolated crystals of the same shape, from which the cementing material had been dissolved by the alcohol, leaving them colorless. Scattered with tolerable evenness over the field were myriads of dusty particles, having a faint tinge of yellow, and moving freely when the slide was rotated. The particles were subsequently found to be oxide of

* This word "strengthen" probably applies to "giving the finished curara adhesiveness or consistence."

calcium; the crystals were taken to be curaria; the cementing material was apparently amorphous. The results of some additional experiments are such as to favor the opinion that curara as now met with is an aqueous extract of a bark, root or stem.

Regarding the medicinal exhibition of curara, the author states that its properties preclude its use in any other form than that of a solution for hypodermic injection. The preponderating evidence relative to the stability of curara in aqueous solution being favorable, the author recommends a hypodermic solution prepared by dissolving one grain of curara in twelve minims of water.

Finally, the author cautions against the careless handling of this poison. It should not be allowed to come in contact with a fresh cut or scratch. Two good rules would be, never to powder it in the dry condition, and never to touch it with the naked fingers.

Dr. Jobert gives the following description of the preparation of curara by the Tecuna Indians at Caldera (Brazil), near the Peruvian frontier. The principal elements of the preparation are: 1. Urari uva, a climbing plant (strychnos castelnæ of Weddell?); 2. Eko or Paris du maharao, a climbing plant, having the characteristics of the menispermaceæ (cocculus toxiferus of Weddell?); 3. Taja, a plant belonging to the Arum family; 4. Eonê or mucura-eaha (didelphis cancrivora?) which has the appearance of an amaranth; 5. Three piperaceæ (of the genus artanthe?); 6. Tan-ma-gere or toucan's tongue. These plants have all been photographed by Dr. Jobert, who also brought specimens of them. The poison is prepared as follows: The first bark from the branches of the urari and eko is scraped very fine, and mixed in the proportion of four parts of the former to one part of the latter. This mixture is rubbed up in the hands and then placed in a palm-leaf funnel, and exhausted with cold water, which is run through it seven or eight times, until it becomes red. This liquid is then boiled with fragments of the stems of the taja and mucura for six hours, or until it thickens, after which the scrapings of the piperaceæ are added, and it is again boiled. When it cools it has the consistence of thick blacking. Dr. Jobert experimented with each of the constituents of the preparation separately, and found that the urari and the taja were the most active.—*Phila. Monthly Review of Medicine and Pharmacy.*

Transactions of Societies.

Wayne County Medical Society.

DETROIT, August 7th, 1879.

Dr. Leonard a paper on "Why Our Bodies are are not Covered with Hair." The paper was a chapter from the doctor's forthcoming work on Hair, and argued the question of why the human body is not covered with a capillary growth. The writer is not fully prepared to admit entirely the theory of the development of the species as proposed by Darwin and his friends, yet admitted it to be unquestionably true that science owes Darwin much for the unlocking of doors hitherto closed upon the history of the development of the race.

Darwin supposes that man originally was clothed with hair from head to foot, the same as the hairy-covered animals; that finally by the process of sexual selection kept up for an unknown number of years, the hirsute covering has been limited to the parts of the body that we now find it upon. Now, besides the influence of sexual influence upon the limiting of hirsute growth as proposed by Darwin there are certain *natural* causes tending to such a result that can be adduced to still farther support the Darwinian theory.

Mr. Wallace, one of the chief opponents to Mr. Darwin's views, puts the burden of proof upon the latter's shoulders by the use of these words: "In man *alone* the hairy covering of the body has almost totally disappeared; and, what is very remarkable, it has disappeared more completely from the *back* than from any other part of the body. Bearded and beardless races alike have the back smooth, and even when a considerable quantity of hair appeared on the limbs and breast, the back, and especially the spinal region, is absolutely free, thus *completely reversing the hirsute characteristics of all other mammalia.*"

"I assume," says the writer, "that this portion of the body, as it is now the most completely denuded, must have been the first to have become deprived of its hairy covering.

1. The analogy that Mr. Wallace would have us draw between man as a mammal, and the other mammalia, in the growth of hair upon the back, is not an apposite one, when you take into consideration the anatomical peculiarities. In the first place, mammals (excepting men), walk upon all fours, and the *back* is then uppermost, on which there is, usually, the longest hirsute growth, and notably so in the manes of the equine and leonine races. Now man makes no use of the forward pedal organs of other mammals as means of locomotion, and in him they become, in contradistinction, manual or hand-like in character and uses; the consequence of this is, he walks upright, and the portion of the body *then* uppermost is the head and not the spine, and it is this portion that is most bountifully of all portions of the body, supplied with hirsute growth. Furthermore, the head is just as much, in an anatomical sense, the back-bone, as any portion of the spine, as it is only a portion of the spine that is more fully developed; in early life there is no head, it is all spine, and is denominated the cerebro-spinal axis.

Furthermore, carrying our analogy down to the monkey tribes, we find, that in most of them the cranial hair-growth is excessive, notably so in the gibbon, jacchus, kakau, mycetes, saki, wanderoo, etc., all of which assume more or less an upright posture. In this same connection I could also suggest the foretops and manes of our equine and leonine races.

2. Man sleeps and reclines habitually upon the back, and the more exercised he is the more he is in that position. This is just the contrary to the position assumed by animals; they sleep either upon the abdominal or latero-abdominal surfaces; a position on the back would be impossible for them to assume for any length of time. Now all this bears out just the contrary conclusion that Mr. Wallace would have us reach, for it only goes still further to prove that man is not dissimilar to other animals in the matter of hirsute growth; on them the abdominal surfaces on which they lie, are devoid

of or sparsely studded with hair; the back on which man lies is devoid of hair also. It is interesting to note that the gorilla's back is also lacking hair, especially in the males; and comes about in this way: he sleeps and rests himself by sitting down at the roots, and leaning his back against the trunk, of a tree. In old females the same condition of affairs is seen; but the younger females build their nests in the trees, and sleep there with their little ones, hence their sides aud abdominal surfaces suffer most in the loss of hirsute growth, the same as is seen in the nest-building, though bald-headed ushiego, which also sleeps among the tree branches.

3. The young of man, and it is undoubtedly much the same with the anthropoid apes, are carried in the arms of the mother till nearly or quite two years of age. In this position the infant is most of the time upon its back, while at the same time the mother's breast and sides and upper abdominal regions and inner arm-surfaces are subject to the friction induced by the moving child, and hence, in the primeval state, the hair covering these parts would be worn from these surfaces. In the gorilla this is specially seen, for the chest and breasts of the female are bare, and in the adult male it is the same; though in the young male there are a few hairs upon the parts that in after years become worn off through friction in climbing trees and the like; undoubtedly the same has also much to do with the want of hair upon the chest of the female gorilla.

4. Besides thus partially accounting for the cause of the lack of hair upon the breasts, the long-continued influence of friction from nursing and tree-climbing would occasion the first loss of hair upon the inside of the arms, and the legs, whilst that upon the outside of the arms and legs might continue to grow. This is the condition now found in mankind, and also in the anthropoid apes. The back of the arms have quite lengthy hair-growths, especially the males, for in the male there is a universal tendency to hair-growth from his stronger sexual development; in witness of this the beard-growth of puberty, and finally the increase of body hair growth in both sexes at this period of life. Then witness the decline of the hair-growth when the reproductive organs begin to fail, as in the turning gray of the hair, and after a time its final loss, thus showing conclusively that sexuality has a great controlling influence over the hirsute production.

Now, none of these causes just given would be sufficient to account for the loss of hair from the human being, unless we allow them to have been in action for a long series of generations, such as is now fair to suppose measures the lifetime of man. The tendency of nature is to reproduce certain types or characteristics even to-day, that are prominent in the parents, as witness the birth-marks that run throughout certain families. If then, our earliest ancestors, the Darwinian apes, if need be, were for a long series of generations exposed to the denuding process as now seen going on upon the backs and breasts of the gorilla; after a time the skin would become devoid of the *tendency* to produce its hirsutic elements, just as is now seen in the callous patches upon the the haunches of the mandrills and other monkeys, and so these marks or bald patches would become finally the subjects of hereditary transmission. Even now baldness in the human race is subject to the same law, and also to the ultimate step that the law implies, viz., that each successive generation would be earlier marked with the bald patches. Thus, for instance, if the great-grandfather became bald at 40, the grandfather could certainly expect to fall a victim to the same complaint at 38, the father at 36, and the individual at 34, and so on down, unless extraneous blood of hirsutic tendency is introduced, until, finally, an individual would remain bald from his birth, as is *now* occasonally seen. Then, too, the more uncivilized man is, the more he is lounging around sunning himself, with his back upon the ground and a hillock or his mud hut for a pillow; or, gorilla-like, propped up against a tree; as to the truth of this, witness the attitude assumed habitually by the South Sea islanders. As the back and haunches are the earliest exposed, to this hair-denuding process, both as regards the position in infancy and also the position habitually assumed by the less civilized nations, it follows that these parts must have been the first to have been deprived of hair, and so first fell under the law of hereditary transmission; hence, as a logical as well as a physiological sequence we find these same parts to-day the most devoid of hair of any portion of the body excepting the palms of the hand and soles of the feet; for these have been equally subject to the law of friction from time immemorial. The second and third finger joints are also pretty free from hirsutic growth; but this only still further carries out the theory I am endeavoring to establish; for, when you come to examine the same joints in the gorilla, you notice exactly the same freedom from hirsutic growth, but in its place you find hard callouses; now why? Because when walking the gorilla supports himself with the backs of the second and third phalanges of his fingers. It is pretty fair to suppose then, from the Darwinian standpoint, that our earliest ancestors made use of the same means for locomotion, and that the reason that these joints of *our* fingers are now free from hair is because *theirs* were covered with this hard callous."

This line of reasoning was closely followed out, analogies being drawn from nature to establish the theory that friction eventually destroys the hair follicles and that those surfaces most exposed to friction were most destitute of hair. This friction coupled with the working of the law of natural selection as enunciated by Darwin, was sufficient to account for the disappearance of the hairy growth which originally covered the species.

Dr. Mulheron regarded the paper as an able ex parte effort. He differed, however, with the writer in his premises. He did not think that friction was sufficient to account for the disappearance of the hair, with which he also believed the human body to have been originally covered. The degree of friction to which the body is likely to have been subjected, could certainly have had no such results, even were it admitted that friction is capable of producing them. There is probably as much friction on the buttocks of the modern human animal as on any other part of his body, but instead of calloused patches, the rule is to find considerable hair in that location—the friction appearing rather to stimulate than to retard the

growth. The thinness of hair on the abdomen of animals can be accounted for in a more satisfactory manner than by supposing it to be caused by the animal's position during repose. The back is exposed to the elements, and nature has arranged it so that these very elements stimulate the growth of the body's natural protection against them. The abdomen is not thus exposed, and the lack of use, as it were, has resulted in comparative atrophy of the hair follicles. Man, at first, experienced no sense of shame on account of his nakedness. As he ascended the scale of being his finer sensibilities were developed, and he resorted to clothing first merely as a covering to his nakedness, and afterwards as a protection against the cold. Hair being no longer necessary it disappeared. There are a number of other causes which, doubtless, have had some influence in bringing about the hairless animal (natural selections, etc.), but the principle is that of clothing.

Dr. Dakin.—The views of Dr. Mulheron seem more plausable than those in the paper. Horses and other animals, on the approach of winter, acquire a heavier covering of hair. He reported a case in which a pup from short-tailed parents was born without a tail.

Dr. Klein.—Indians do not wear head coverings. He had never seen a bald-headed Indian. Hair in the nostrils and on parts of the body where there is considerable friction seem to oppose the theory advanced in the paper. Selection may produce marked results. Offspring resemble their parents. Breeding from short-tailed dogs, whether short from nature or from art, results eventually in short-tailed offspring.

Dr. Yemans.—The Darwinian theory is good to generalize on, but on trial fails to connect. There is a missing link. No theory accounts for all things observed. Probably this is the best—God formed them as they are.

Dr. Rouse.—The development theory in many respects is very plausible. Those engaged in raising plants and animals make free use of "selection" with wonderful results. Desirable traits are transmitted and intensified through individuals with these traits best marked till the offspring bear but slight resemblance to the original parents. Our cultivated plants furnish many illustrations. Baldness may be caused by wearing tight hats.

Dr. Brodie.—Am not in favor of the Darwinian theory. Does not think man is an improved ape. There may be marked modifications but no new species. Animals have been created with parts adapted to particular uses. Certain characteristics seem to result from nationality. Bald heads are more common among Scotch and Irish than among English and American people. Where there is a full growth of hair the skin is usually thick. Bald-headed people usually have thin scalps and skulls, Repeatedly singeing the hair from any part will prevent its growth thereon.

Dr. Mulheron.—A woman had been in labor for some time; the head was on the perineum, the os dilated and the pains strong, but as no progress was made, forceps were applied and delivery effected with very little difficulty. The child was asphyxiated but recovered in about half an hour. Another physician who was present attended to the woman after the child was born, but could not remove the placenta, which was adherent. He (Mulheron) introduced the hand and removed about three-fourths of the placenta, but the patient and friends would permit no further attempts though warned of the danger. There was considerable hæmorrhage, but as no further assistance was permitted, he left the patient in the hands of the assisting physician and the friends. Death soon followed. Could, under circumstances, anything more be done?

In answer to this question the general sentiment was in favor of the course pursued.

Dr. Klein reported a case in which he was about to use the forceps, but being prevented by the friends left the patient.

DETROIT, Sept. 4th, 1879.

Dr. Leonard read a paper on dermoid cysts.

Dr. Gustin.—Saw two hair-balls taken from a Californian cow. There were about six inches in diameter and nearly round.

Dr. Mulheron.—Saw a hair-ball from a Texas steer. It was spherical and two inches in diameter.

Dr. Brodie.—Hair-balls are formed in the stomach of those animals which shed their hair. The hair is removed by licking, and is then swallowed. He exhibited a ball of this kind for inspection.

Dr. Richards.—It is possible that some animals, as cows, deer, etc., lick themselves for the salt contained in their perspiration.

Dr. Norton.—There is a race of people—supposed to be the original—in Japan who are said to be covered with hair about two inches in length.

Dr. Richards.—A woman had been in a fit about an hour. There were rigors and frothing at the mouth. Gave chloroform till the action of the heart became irregular, and then injected assafœtida. Called again in a short time. There had been two rather severe convulsions, and some hæmorrhage from the mouth, due possibly to the rupture of some small blood-vessel. This woman, who was about five months advanced in pregnancy, had been taking a preparation of tansy and cedar ordered by some doctor but she states none had been taken for some time.

A midwife in the eastern part of the city while attending a woman, mistook an arm for a leg. In attempting to deliver by traction the arm was torn from the body. A physician was then called who effected delivery by turning.

Dr. Leonard.—A squaw at full time of gestation was going with her tribe to receive her bounty, carrying a papoose and bundle of about sixty pounds on her back, when labor pains occurred. She left the company, sought the seclusion of a clump of bushes, divested herself of her burden, had and attended her babe without a murmur, and resumed her journey with her new-born child, within half an hour.

Dr. Richards.—It is the usual Indian custom to be confined alone as in this case.

Drs. Rouse and Norton reported cases of tonsilitis—so-called diphtheria—in the northern part of the city.

W. H. ROUSE, M. D., Secretary.